

In Fig. No. VII. Mr. Williams reneges his inaccuracy with relation to my patent; for "Improvements in Steam-Boilers," actually dated August 10, 1855, but, in conformity with his practice, and probably of his policy, mentions it as being his my "first patent of 1856." He also says, "the patent was taken by him as my 'first patent of 1856.'" I have no objection to his saying so, so long as he understands to be for furnace-doors, and means for boilers. I reproached him with the misrepresentation, and called upon him to quote the claim in my specification, which would entirely negative the assumption he had so mistakenly paraded. Having, with his peculiar weakness, given us a copy of the utterly unimportant part of my drawing, and upon which not the remotest claim is made by me, he says, "it would be difficult to find even a mechanical difference between this and the Fig. No. II. of the New sets boiler, and No. III., that described by Dr. Ure;" and, for once, I am ready to admit that therein he is constructively right. What a wonderful discovery! It is equivalent to saying that the *f* in *falsely* and the *f* in *fact* are typographically the same, although the purport of the words is so essentially dissimilar. Now, the pervading feature of the patent of 1856, for "Improvements in Steam-Boilers," is the introduction of water or steam, or combustion chamber, into the boiler, and the opening of the furnace by its doors, in the manner fully described. As we shall see from the trial record, it is not at all

...of the piston, cylinder, or any other pre-existing part of motive-power machinery; and, as a natural consequence, I confined my claim to the sustainable novelty of the invention, consisting of the combustion chamber in the special combination of parts, and the manner of its construction, and the manner of its operation. These are the words— I make no claim to the several parts respectively mentioned, but I do claim the peculiar arrangement of the parts of the combustion chamber, and the manner of its construction, and the manner of its operation. Here, again, Mr. Williams has, twice over, misled your readers, by giving a false impression of the fact; and in positive contradiction of the official publication of the invention, and upon which he professed to establish his statement! In Fig. No. VIII., now that I have before me Fig. No. II. for fair comparison, I will make a practical admission to Mr. Williams in a separate letter. I will, however, make him with other admissions before I close this; which are, that a gridiron is a gridiron, and that a colander is a colander, whether square or round. Moreover, a door is a door, whether it has holes in it or not. But I cannot follow him out in the inference to which he would lead us, that a circle is a square, a sphere a cube, or a straight line a curve. I assure your readers that it has given me the greatest pain to be obliged, in the course of this controversy, to expose so many inexcusable errors on the part of my opponent— errors that might have been avoided by the commonest care in the examination of documents to which there cannot be (indeed there has not been) any dispute as regards authenticity; whilst it has been borne in mind that I have never initiated, however involuntarily, the personalities imported into it; and that the very object of these letters was nothing short of a direct imputation of fraud against me, with an attempt to destroy property as legally and honestly mine as any of which I am the owner. W. Williams is the unenvied possessor. J. LEE STEVENS. Fish-street-hill, Oct. 4.

COMPETITIVE FURNACE-DOORS.

CHALLENGE TO MR. CHARLES WYE WILLIAMS, OF LIVERPOOL.

Sir.—In reply to an incidental taunt from Mr. Charles Wye Williams, I intended to specifically assert the "superiority" of my Patent Regulating Air-Doors over those plans emanating from himself, which he protested to be "identical" with mine. The absurdity of anything being better than itself is a proposition belonging to his system of logic, and for which I am not to be held accountable. Taking, then, the particular plan described by him in your Supplement of October 2, text and diagrams together, under the heading "No. II. COMPETITIVE FURNACE DOOR," as the basis of comparison, I claim for my invention the following prominent points of superiority:— 1. The provision of more numerous $\frac{1}{2}$ in. internal apertures for the passage of air, than the doors of equal size. 2. The greater durability consequent upon presenting curved instead of plane surfaces to the action of the fire. 3. The increased heat of the air in its passage through the door. 4. The facility of adjustment, to meet the different requirements of fuel of more or less burning quality, and of varying local conditions. 5. The successful application of my invention without the necessity of using, in addition, "a box over the door," and "two boxes over the sides," to which Mr. Williams alludes to have recourse. I affirm these propositions, as constituting sufficient grounds for the assumed superiority of my invention over the method of Mr. Williams, at least and especially in question; and in the belief that it is not necessary for me to prove, as I might otherwise do, that the foregoing propositions are enough for my immediate purpose, and, as a corollary, I adduce the fact, that your columns have from time to time contained ample evidence (of which I shall furnish more next week) that my Patent Regulating Air-Doors suppress smoke, increase steam, economise fuel, prevent the escape of steam, ventilate the stoking rooms, save labour and loss of life in cleaning tubes or flues, and are applicable to pre-existing furnace mouths, as well as to any form of new boiler furnaces. In my anti-position with these practical proofs in my favour, we have nothing offered by Mr. Williams but the continually vaunted "Newcastle experiments"—experiments which I will hereafter show to be anything but creditable to the leading actors in the present competition. For he has not brought forward a single instance of the successful operation of his plan on board Liverpool steam-ships, from the port in which he is now engaged in his business affairs, from the town in which he has so long resided, nor from any part of the United Kingdom; and out of the "thousands of furnaces" he is now converting to, or constructing upon, his plan on land not one has yet been proved as still in existence throughout the metropolitan district. These omissions on his part conclusively prove that my invention is practically superior. Nevertheless, it is far from my wish to rely upon any argumentative deductions. The only satisfactory termination of a dispute is an actual and absolute solution made in the presence of disinterested witnesses. I call upon Mr. Williams to settle with me, through the mediation of any Engineer of eminence to whom we may agree to refer it, the formula of a fair and equitable compromise, on a commensurate working scale, such as to be made in a steamship of large capacity, or in a land establishment of corresponding importance, as conveniently as may be made to both of us, and unaffected by any individual influence. It being, of course, understood that our respective plans—the "Newcastle" and the "Regulating"—are to be adapted to pre-existing boiler furnaces; and that any advantage claimed by either of us shall be based on the actual results of the experiment. Whichever of us may, upon his request, be defeated, let it be agreed that he (the loser) shall pay a fine of twenty guineas to the winner, to be presented by the winner to any local charity of his own selection; (I avail the reply of Mr. Williams to this proposal, in the sincere hope that it will be his early and favourable consideration. J. LEE STEVENS. Fish-street-hill, Oct. 6.

TOLVADEN MINE.

I have read with some interest Capt. Charles Thomas's report on this mine, published in Mr. Murchison's able Review, and I cannot see that it justifies the very favourable statements which have lately been circulated. In your Journal of July 17, it was stated that "the lode in the 20 and 3 1/2 ft. wide, solid ore, supposed to be worth 10 tons to the ton, at 100, or 140, per ton. This is the greatest discovery made in Cornwall for the past 20 years." In the Journal of Aug. 7, Mr. James Hollow, writing to Mr. Murchison, says—"It is well known that there is no level below the 20, and that the 20 is a small course of ore in that level." Again, on Aug. 21, it was stated that the lode in the 20 and 3 1/2 ft. wide, solid ore, supposed to be worth 10 tons to the ton, at 100, or 140, per ton. Now, Capt. Charles Thomas says the 20 west has been worked for 32 fms., the last 4 fms. not of much value; the lode cut through 8 ft. behind the 20 ft. wide, unproductive. The ore ground driven through he values at an average 80 per ton. The same level he says is driven east 26 fms., 16 fms. of which are "hard poor," and the other 10 fms. are being worked at 6s. 8d. in 11. He concludes—"The mine for the depth and extent worked has been very productive; a large portion of the ore hitherto raised has been from the 20. The eastern deposit at the 10, and the 20, are one in the 20, and nearly as good as the 20. These and other showing the extent of the settled lode, which, though not so rich as the 20, yet, if continued, is of great length and depth of the same value, of which there is a probability, profits moderate extent can be realised." These are facts, and I leave your readers to judge for themselves the announcement of a course of ore worth 140, per ton, in the 20, and that the lode in the bottom is as productive as it ever has been; or that this is the greatest discovery made in Cornwall for the last 20 years. He repeatedly has boasted of in your Journal that no call has been made in this mine, but so far from that being matter for boasting, I think it deserves strong animadversion. Mr. Murchison says that the 20 is a small course of ore in that level, and that the lode in the bottom is as productive as it ever has been; or that this is the greatest discovery made in Cornwall for the last 20 years. He repeatedly has boasted of in your Journal that no call has been made in this mine, but so far from that being matter for boasting, I think it deserves strong animadversion. Mr. Murchison says that the 20 is a small course of ore in that level, and that the lode in the bottom is as productive as it ever has been; or that this is the greatest discovery made in Cornwall for the last 20 years.

IRON MANUFACTURE—WONDERS WILL NEVER CEASE.

I have oftentimes been at a loss to understand the reason that the name of Cort & Co. kept so much in the background, but now I fully comprehend the whole mystery. It would awaken the very early recollections of the past. There is scarcely a name in the catalogue of genius, with the exception of Henry Cort, that has not been before the public, from the Iron Duke down to the grand-daughter of Dr. Johnson. A penny book but informs us of a Newton, of a Bacon, of a Watt, of a Stephenson, and their scientific discoveries, their struggles through difficulties, their success and their rewards. But everything is as dark as the grave respecting the name of that much-suffered individual, Henry Cort. The only thing some of the wealthiest have done to honour the 40th part of a farthing a ton for all the iron rolled under his patents, is to have been themselves millionaires, as the Times says, by the use of his invention. It is the rich and successful who are paraded as the terrestrial eclipses of the present, while the ruined successors of the real master mind, or founder of national wealth, are treated with insult and neglect. The late Mr. Richard Crawshaw intended, no doubt, to be one of Henry Cort's earliest adherents when he signed a contract to pay 10s. per ton for all iron rolled under his patents. In a year or two after Cort had erected all the works at Cyfarthfa, Mr. Crawshaw appears to have been so satisfied in his own mind of the golden harvest to be derived from the gratuitous use of Cort's inventions, that he was the first to subscribe 1000, to make a canal from Merthyr to Cardiff; and to show that he did not reckon his share before they were hatched, Mr. Scrivenor, in his *History of the Iron Trade*, gives account of something like 2,000,000 tons of iron sent down the Glamorganshire by the ten principal iron companies from 1817 to 1840. How much in another 20 years previous to 1817, and for 17 years since 1840, after 43 years, is not known. Only four of the ten companies—Cyfarthfa, Dowlais, Pen-y-darren, and Plymouth—were represented in these 24 years 1,734,116 tons, so that the 43 years must have totted up the account prodigiously, probably altogether for the greatest companies not less than 5,000,000 of tons. Yet the name of Henry Cort, the father of our country, and the father of the British Iron trade, is as little known as the name of the coal and iron working classes in South Wales, who have been fed and clothed by his inventions for more than half a century past, as the name of the brightest star in the tail of the comet.—Oct. 8. A. PUDLER.

NEW METHOD OF PROPULSION.—The visitors of the Royal Polytechnic Institution have recently been entertained by an invention due to Mr. Giles, an Australian, who has come to this country to endeavour to introduce his system of making steam-propelled vessels in every department of land traction. The principle upon which the system is based is, that a force worked vertically, or at an angle of 45 degrees with the horizontal, can be transmitted horizontally with no further sacrifice of power than that which is absorbed by friction; and that a weight suspended on the summit of a leg, instead of being described from the resting point, a horizontal tractive power equal to that weight, is at the same time, and represents the same amount of pressure which it would exert if perpendicular. The model by which the inventor illustrates his principle consists of a box, which contains a spring, by which it is worked. This box is only 1/2 in. in width, and it raised a weight of 35 lbs. over a pulley at a considerable angle to the plane of motion. The inventor also exhibited the application of his invention to water traction by means of a model steam-engine, the screw of which is placed near the water, and works at an incline instead of perpendicular to the water's edge.

THE MINERAL WEALTH OF THE UNITED KINGDOM.

TIN.—The quantity of Tin Ore raised in Cornwall and Devonshire for the year ending Dec. 31, 1857, has been computed from the returns obtained from the smelters as having been in Cornwall, 9634 tons; Devonshire, 149 tons=9783 tons. The Stannary Court return for the year ending Sept. 29, 1857, being—
Cornwall.....Tons 9634 9 23
Devonshire....." 149 3 20=9708 13 0 23 tons.

The value of all the tin ore sold from the Cornish mines, of which returns have been made to the Stannary Court for the year ending Sept. 29, 1857, 740,827. 3s. 4d.; ditto from the Devonshire tin mines, 7331. 0s. 9d. = 748,158. 4s. 1d. The value of the tin ore of Cornwall and Devonshire sold for the year ending Dec. 31, 1857, computed at the mean average price, deduced from returns obtained from the smelters and various sources, 743,508. The market prices of metallic tin (white tin) were, during the year, as follows:—
Highest price.....£146 per ton.
Lowest price....." 108
Mean average price for the year....." 136

The computed quantity of tin produced from all the ore raised in Devonshire and Cornwall was, for the year ending Dec. 31, 6582 tons. This will give, at 136. per ton, 895,152. as the market value of British tin. While for the year ending Sept. 29, 1857, according to the Stannary returns, the quantity of tin may be computed at 6380 tons, the market value of this tin being 867,680.

COPPER.—The total quantity of copper ore sold at the ticketing sales, to Dec. 31, was 191,798 tons. The average percentage produce was 52. The produce of metallic copper being 12,179 tons 18 cwt. 1 qr. 2 lbs. The money value of the ore being 1,201,270. 15s. The variations in the copper ore standard were—
Dec. 16—Lowest standard.....£123 3 0
Jan. 14—Highest ditto....." 162 4 0
Average ditto....." 140 7 0

The total quantity of British, Foreign, and Colonial ores sold by public ticketings at Swansea was 37,657 tons; the copper produce 5266 tons, at 14 per cent. average produce; money value of ore, 574,889. 5s. To show correctly the produce of the United Kingdom, it must be remembered that of this quantity there was sold of colonial and foreign ore 26,728 tons, producing 4084 tons 19 cwt. metallic copper, and 447,986. 18s. 6d. value. The precipitate and sundries being regarded as British produce, will leave as the actual returns from British, Welsh, and Irish mines, sold at the public ticketings in Swansea, 10,929 tons ore, 1182 tons 16 cwt. copper.

PRIVATE CONTRACT PURCHASES.—The purchases made by the large copper smelting firms of Swansea, &c., show the following result:—Ore, 48,155 tons; copper, 12,037 tons 4 cwt. A considerable proportion of this consisted, however, of foreign and colonial ores. Large purchases of both British and foreign copper ores were made by firms at Liverpool and elsewhere, from whom returns have not been obtained. By careful computation the results given below have been arrived at. The total copper produce from the mines of the United Kingdom for the year 1857 will, therefore, be as follows:—
Ore. Copper. Value of ore.
Cornwall and Devonshire.....Tons 191,798 12,179 18 £1,201,270 15 0
Swansea sales, from Irish, Welsh, and other mines, 10,929 1,182 16 " 120,902 6 0
Purchases by private contract from ditto 16,052 4,012 8 " 232,749 10 0
Total 218,889 17,375 0 £1,554,922 11 6
Mean average market price of copper, £124.

LEAD AND SILVER.—The total quantity of Lead Ore raised in the United Kingdom was 96,820 tons 10 cwt.; this produced of metallic lead 69,266 tons 5 cwt.; from which there was separated, according to the returns furnished to the Mining Record Office, and to assays obligingly supplied by the smelters—of silver, 532,866 ozs. The prices given for lead ores at the Holywell sales were as follows:—
The highest price during the year, rejecting a few exception lots, which sold for 30l. and 19l. per ton.....£25 0 0 per ton.
The lowest price during the year (omitting a few small parcels of very poor ore) 8 10 0
The mean average price deduced from all the sales....." 14 15 0

This mean average price fairly represents the price of lead ore in all parts of the United Kingdom. Giving as the value of the ore 1,428,055. the prices of pig-lead in the metal market were as follows:—
The highest price during the year.....£25 0 0 per ton.
The lowest price during the year....." 20 0 0
The mean average price....." 22 0 0

The market value of the lead produced was, therefore, 1,523,852. The value of the silver, at 5s. the ounce, was 133,216. 10s. Foreign silver ores imported and sold, 5190 tons, containing of pure silver 846,569 ozs.

SUMMARY OF LEAD AND SILVER PRODUCE.

	Lead.	Silver.
ENGLAND.—		
Cornwall.....Tons 9,559 16	6,936 7	224,277
Devonshire....." 2,596 11	1,535 14	50,262
Shropshire....." 485 10	350 20	—
Shropshire....." 3,349 15	2,560 15	—
Derbyshire....." 9,233 0	6,061 0	—
Yorkshire....." 12,405 19	7,875 12	—
Westmoreland....." 2,798 10	2,102 20	24,808
Cumberland....." 6,450 0	4,718 8	43,460
Durham and Northumberland....." 21,580 1	17,073 14	74,091
WALES.—		
Glamorganshire....." 1,081 0	776 10	2,032
Cardiganshire....." 9,914 9	7,334 12	37,097
Radnorshire....." 108 10	81 5	—
Montgomeryshire....." 2,389 12	1,899 5	4,825
Merionethshire....." 332 10	250 4	640
Denbighshire....." 4,161 0	3,240 20	2,206
Pembrokeshire....." 3,066 10	2,280 14	13,297
Flintshire....." 441 17	320 13	—
ISLE OF MAN....." 2,656 0	2,027 15	48,016
SCOTLAND....." 1,890 9	1,351 4	4,206
IRELAND....." 2,298 19	1,407 3	3,071
Sundries, under five tons....." 67 0	48 0	133
Total....." 96,820 10	69,266 5	532,866

(To be concluded in next week's Mining Journal.)

COAL FOR STEAM NAVIGATION.—The great cost of coal for shipping purposes is apparent from the single fact that the 270 steamers in the British navy, with about 50,000 aggregate horse-power, consumed, in 1856, 750,000 tons. It is laid down, as a rule of general application, that the power of coal necessary to produce speed increases as the cube of the velocity. Taking a Collins steamer of 3000 tons, it has been found that in running 14 miles per hour, as they have frequently done, the consumption would be 128 tons per day, or 1252 tons for the passage. And yet one of these steamers could make 12 miles per hour on 804 tons per day, or 11 miles per hour on 619, or less than half that used at 14; all going to prove that fast mail steamers cannot live on their own receipts on the ocean. The greater the speed of a steamer the less it is able to carry freight; and the time will doubtless soon come when the fast mail packets will take nothing except a few express packages.

UTILISATION OF PEAT—WET FUEL FURNACES.—A very admirable arrangement for utilising peat, and similar substances, as a fuel for steam-generating purposes, has been patented in the United States, by Mr. Gideon Bantz, of Frederic City, Maryland; the principle upon which the furnace is constructed being to produce such a heat in the fire-chamber as shall decompose the water contained in the fuel, and make its gases also available as a heating material. Two arched fire-chambers are arranged side by side, and furnished with bars and ash-piteneath. These fire-chambers are not placed below the boiler, but direct in front and parallel with it; although they may be placed at one side of the boiler, or at any angle to it. Each is provided with a front fire-door, but these are only used for lighting the fires, and the ash-pits have doors to regulate the supply of air through the grates, and permit the removal of the ashes. On the top of each chamber are feeders for supplying fuel. The chambers are covered with a flat floor built over the arches, the fuel may be wheeled to the feeders. At the rear end of each fire-chamber there is a throat-like aperture communicating with a reservoir, built of brick, lined with fire-brick, under the front of the boiler, and which is a concave bottom and a convex back. The convex back of the reservoir terminates in and serves as a bridge wall, and has a concave top so formed as to leave a space of 3 or 4 in. between it and the boiler. Behind this bridge wall are a series of reverberatory chambers, separated by walls, the chamber being provided with one or more doors, for the purpose of admitting air in sufficient quantities either to complete the combustion of the gases from the fire-chambers or to check the draft. The reservoir is finished with a door for a similar purpose, and at the rear of the last chamber there is a wall, behind which is a drop flue leading to the chimney.

Meetings of Mining Companies.

TREWEATHA MINING COMPANY.

The general meeting of adventurers was held at the offices of the company, Adam's-court, on Tuesday, Mr. J. BALSTON in the chair.
Mr. DUNFORD (the secretary) read the notice convening the meeting, and the minutes of the last, which were confirmed.
A statement of accounts, to Aug. 31, was read, from which the subjoined is condensed:—
Balance last audit.....£ 814 6 2
Mine cost May, June, July, and Aug..... 1128 13 2
Merchants' bills..... 641 7 9
Dues..... 47 15 0
Interest, &c..... 7 19 9=£2940 1 10
Calls received.....£ 685 1 0
Ore sold..... 1454 8 8= 2169 9 8
Balance against adventurers.....£ 470 12 2

The following report was then read:—
Oct. 9.—Since the last general meeting we have driven a cross-cut from the bottom of the engine-shaft (the 90 west) and intersected the lode, and extended thereon about 9 fms. south and 7 1/2 fms. north. The lode throughout this drive has produced saving work, and from the strong nature and general character, as well as the size of the lode, which is much larger on the average than anywhere seen in the mine, we are of opinion that not only should the drives be continued, but the sinkings also, as there is a very great chance of discoveries in depth. The 70 has been extended north 14 fms. 2 ft. 5 in. through this drive; we have had some good bunches (stopping ground) in places, worth 4 1/2 per fm. In the present end the lode is worth 4 1/2 per fm. The last 12 fms. driven has shown such improvement, more particularly in the bottom of the level, that we have every reason to hope that something very good will be laid open in the 90 northward under this productive ground. The 50 north has been extended 3 fms. 3 ft. 8 in., from the present end of which we commenced a cross-cut towards the eastern lode, and have driven 11 fms. 4 ft. The present end is now in the capel, and we hope to get into the leader or ore part of the lode in the course of a few days. There are only five stopes, the returns from which, although small, will pay a fair profit on working.—J. RICHMOND, W. ROWE, & P. S. The cost of new pitwork for sinking to a 100 will be about 2000, at new price, probably second-hand may be obtained for much less. From the nature of the ground in the present bottom we calculate the shaft can be sunk at about 23l. or 24l. per fm., and we would advise this very important work being carried out with as little delay as possible.

The CHAIRMAN, in moving the adoption of the report, said they must go deeper, as they were only at the 90, and Trevelyan was not successful at that depth, but they cut the lode rich in the 100, and had continued so ever since, and they must remember they were on the same lode.
Mr. WEBB considered they ought to prosecute the sinking with vigour.
Mr. DUNFORD remarked that at Trevelyan they were poor in the 90.
The CHAIRMAN said the northern part of the mine had much improved, as during the last four months they had only lost about 470l., and the total liabilities were 1152l., and the assets 615l. In point of fact, a call of 3s. per share would be sufficient to carry them on for three months.—The report and accounts were then unanimously adopted, and a call of 3s. per share made.
Mr. DUNFORD said it was necessary to deal with the forfeited shares. There were very few, as out of 185 forfeited the whole had been restored with the exception of 88, and, as there seemed no chance of the others being paid on, the best course was to sell them by public auction, that effect was agreed to, and another to forfeit shares in error of call up to the present time if not paid before Nov. 12 next. Such shares to be disposed of for the general benefit of the company.
Mr. WEBB wished to know the cause of the mine getting so poor?
Mr. DUNFORD replied that it fell off below the 50, and had since then continued poor, and according to the neighbouring mines, they could not expect to resume dividends until they got deeper.—A vote of thanks to the Chairman terminated the proceedings.

HOLMBUSH MINING COMPANY.

The quarterly meeting of proprietors was held at the offices of the company, Bucklersbury, on Wednesday, Mr. R. HALLETT in the chair.
Mr. HACKETT (the secretary) read the notice convening the meeting, and the minutes of the last, which were confirmed.—A statement of accounts, to the end of July, was exhibited, from which the subjoined is condensed:—
Balance last audit.....£1196 8 10
Mine cost May, June, and July..... 2988 7 7
Dues..... 68 5 4=£4253 1 9
Copper ore sold, June.....£1227 5 1
Lead ore sold..... 259 4 3
Copper ore sold, August..... 910 11 11
Call due..... 984 0 0= 3481 1 3
Balance against mine.....£ 822 0 6

The CHAIRMAN remarked that the accounts were only made up to July, but they showed an improvement in the following two months.—Mr. HACKETT read the following report:—
Oct. 11.—The following is my report on the above mine, detailing the operations since the general meeting in June last:—The 160, east of the diagonal shaft, has been extended about 4 fms., at which level it was met with, on which a level was driven west 9 fms., and intersected another part of the lode, on which a level has been extended east and west (principally west) 10 fms.; the lode for the whole of the driving is worth 15l. per fm., and the lode now in the upper part of the eastern end continuing equally good. The lode in the western drive will, I have no doubt, merge into the former level (from which it branched off) in a few fathoms further driving. The lode in the stopes in back of this level, which is now being worked, is also worth 15l. per fm. In the 160, west of diagonal, there has been driven in different directions, through hard and troublesome ground, about 6 fms., without, I regret to say, finding the corresponding part of the lode driven on east of the great cross-course; the men are now driving in a westerly direction, on a branch which we expect will guide us to the object we have been so long in search of—the main part of the lode, west of the cross-course, between which and the lead lode still lies a rich deposit of ore, which must be drained by this level before it can be profitably worked; every effort is, therefore, made to attain this object. At the last general meeting I reported of having intersected a lode by cross-cutting south from the 145 west, and driven 7 fathoms on its course. Since that time there have been 11 fms. more driven, the lode being worth on an average from 12l. to 15l. per fm.; the lode in some part of the driving in bottom of the level is worth 20l. per fm.; the stopes in back of this level are worth 10l. per fm. I may here also remark that this end, in which we have this promising and productive lode, is extended further west than any other level in the mine, and is within a comparatively small distance of our former boundary, from which circumstances can be seen the necessity for, and the value of, the grant of the additional ground further west, so recently obtained by the directors from the Duchy of Cornwall. A trial cross-cut is also in course of driving south from the 132 end west, to intersect the same lode as in the 145 west, supposed to be in that direction from the circumstance of its being found further south in the 145; this cross-cut has now been driven about 2 1/2 fms. south, and consequently the lode is not yet reached. Should the lode be found productive at this point, as is anticipated, it must greatly enhance the value of the western part of the mine, as the ground above this level is yet unexplored all the way to surface. On the flap-jack lode, in the 145, the level has been extended west about 6 fms.; the greater part of this driving has been unproductive, with the exception of one or two small bunches that have been met with; this end is driven to within about 12 or 15 fms. of the lead lode, to which point it will be advisable to extend it, but not before the necessary alterations in the pitwork, which are now being proceeded with, are made to receive the additional water consequent on the intersection of the lode in this level. A trial cross-cut in back of this level 3 fms. 4 ft., and will be continued for the purpose of exploring the high piece of ground between the 145 and 120; the lode in the rise has been yielding about 1 ton of ore per fm., but of rather inferior quality. The 132 has been extended south on the lead lode 35 fms.; in the course of this driving the lode has yielded on an average about 5 cwt. of silver-lead ore per fm., and is of the same value now in the end; this end is suspended for the present, to allow the water to drain from the unwrought ground above, as also to allow a rise to be put up in back of this level, to communicate with the level above. A rise has also been put up in back of this level, 35 fms. north of the present end, and communicated with the level above, by which a great many fathoms of lead ore ground are laid open, and may be worked on tatwork or tribute, as may be found most profitable. In accordance with the wishes of the directors, we have commenced the necessary alterations in the pitwork, preparatory to sinking the western shafts to a deeper level. This will be carried on with all the expedition the nature of the work connected with the prosecution of the mine will admit. The value of the copper and lead ore available in backs of the levels, and the ore discovered in bottom of the levels, but not yet fairly available, is 13,500l., showing an increase of ore discovered in the last three months of 1500l. The number of persons employed in the different departments, underground and at surface, is 300.

The CHAIRMAN, in moving the adoption of the report and accounts, said since the accounts were made up they had sold 30 tons of lead, at 17l. 18s. 6d. per ton, and they had 160 tons of copper ore for sale on Thursday next, which upon assay average upwards of 10 per cent. The quantity of lead for the three months was the same as in the preceding four months, and the sales had yielded 1800l. against the cost of 2000l.; showing the loss to be 200l. in the two months, against 400l. the previous two months.

The report and accounts were then unanimously passed.
The CHAIRMAN said the next resolution was to confirm the forfeiture of the 506 shares in arrears of call, agreed to at the last meeting. He had received several applications from the parties asking for them to be restored. The Chairman then read the various communications upon the subject.
Mr. BIRDSEY knew that several of the parties had paid large amounts for the shares, and that there were only two calls, of 4s. each, in arrears, he would move that they be restored if the arrears be paid within 14 days, or otherwise that they be absolutely forfeited. The resolution was seconded, and carried unanimously.
Mr. BIRDSEY said, as Mr. Verran was up from the mine, he might be able to give them some information about the property, and the probable amount required to carry it out.
Mr. VERRAN replied that he was not at the meeting officially, but only as a shareholder; and not being the manager, he could not go into the matter, as he should not like to make a statement that afterwards might be found incorrect.
Mr. BIRDSEY thought Mr. Verran might give some information respecting the prospects of the mine.
Mr. VERRAN's opinion was very favourable as to the present appearance of the mine, especially in the 160, for so soon as they got through the little cross-courses he believed they would be in a paying state. They had got through the great cross-course, but found the lode disordered by the smaller ones. They found the lode rich in the 145, and had every reason to believe it would be so in the 160 fm. level, where the ore ground might be reached in three months.
Mr. WATSON said, if they had taken his advice some years ago they would have saved thousands of pounds, and he would again repeat that they ought to stop it, and dispose of the property. They had a most respectable board of directors, who had no object to serve but the general interest of the shareholders; they might go on paying calls, but would never get a dividend. He should move that the directors be requested to sell the mine by private contract, together with the whole of the machinery, and divide the surplus *pro rata* amongst the shareholders.
The CHAIRMAN said there was no chance of the resolution being carried; and, indeed, it would not be legal without a special general meeting. Any one could relinquish, have the property valued, and get their proportionate share.
Mr. BIRDSEY said that was precisely what he wanted to arrive at the last meeting. They could pay up the share of the cost to the end of the present month.
Mr. HACKETT read the rule, by which it appeared that course could be adopted, upon the same principle as the Cost-book System.
A PROPRIETOR wished to know whether there was any chance of a call being made?
The CHAIRMAN said in his individual opinion there would be a call, for he would never

consent to allowing the mine to be deeply in debt, and when a certain amount was due they must make a call to meet it. He wished it to be distinctly understood that Mr. Verran came up on his own business, and not at the request of the directors.

Mr. WATSON proposed a vote of thanks to the Chairman and directors, which was seconded, and carried unanimously.

NORTH WHEEL FRANCES MINING COMPANY.

The bi-monthly meeting of adventurers was held at the offices of the company, Cannon-street, on Thursday, 12th inst. Mr. CHARLES HUNT in the chair.

Mr. DARLINGTON read the notice convening the meeting, and the minutes of the last, which were confirmed.

The reports of Capt. Moyle and Mr. Garland were next read, as follows:—

Oct. 8.—Since the last general meeting, Eales's shaft has been sunk 5 fms. 3 ft. below the 60; in sinking the last 3 feet the water has been coming from the south side of the shaft, where we expected to find more of the lode. By blasting a hole into the shaft, we discovered the main part of the lode, of a very soft spar, peach, and stains of black ore, being 2½ ft. wide, of a very promising appearance, with a regular south wall, which has not been seen from the 48 to the present depth until yesterday; my opinion is that it is the part of the lode that made off south in the 48, and is come in again. The 60, which was commenced driving west of Eales's shaft the beginning of last month, by four men, is 6 fms. west—present price 3½ per fm.; the lode is divided into three branches. I have no doubt but that the main part of the lode is also south, as in the shaft, which will be proved by driving on a little further, as the branches seem to bear south of west towards the main part of the lode in the shaft; there is a very promising white stratum of granite in this end for mineral. The 36, west of Eales's, is driving by six men, at 5½ per fm.; 15 fms. have been driven since the last meeting, being now altogether west of Eales's shaft 102 fms. we estimate about 8 fms. to cross the lode, the lode is 2½ feet wide, composed of capels and hard spar—unproductive; the ground has been very hard for the last month, but is changing for the better. Hunt's shaft is sinking under the surface by nine men, at 11½ per fm., and is being sunk 17 fms. under surface; we have the cross-course in the shaft, and I can calculate with more certainty its position. To communicate this shaft with the 36 we have to drive (after we cut the cross-course) about 45 fms. on the cross-course south, and sink the shaft 45 fms. deeper; by the present appearance of the ground it will take from 12 to 14 months to communicate. As Hunt's shaft and the 36 are the main points now in operation to communicate to intersect the object in view, we are urging on with all the speed we possibly can to intersect the south lode, and I have a very strong opinion that when we get at these lodes under the hills into the granite which runs parallel with North and West Basset Mines, they will prove productive, and as the lodes here have not been developed at the depth those mines are, where the main bunches of ore have been found, I consider there is little to fear, but everything to hope for, therefore I beg to advise perseverance. I would also lay before you that we may expect a large increase of water at Hunt's shaft as soon as the rains set in, and to expedite the shaft it would be advisable to prepare a line of rods from the engine to Hunt's shaft, which is about 160 fms.—JOHN MOYLE.

Oct. 13.—For the information of the shareholders to-morrow, I beg to say that the discovery which is reported at North Frances is not of ore, but of the south part of the lode, and evidently the main part, which in the disordered ground about the 48 dipped to the south, but is now come into the shaft; it is 2½ ft. big, and a kindly lode. The part of the lode in which we were sinking is joining it in the bottom of the shaft, so that we shall now sink quicker, as the new part of the lode is much finer. We are also turning the end south in the 60, and expect we have there about 9 ft. to cut the south part, on which we shall then drive. Instead of a few small poor branches to sink and drive upon, we have now a large, well-defined, and promising lode.—T. GARLAND.

A statement of accounts, from Aug. 5 to Oct. 14, was exhibited, from which the subjoined is condensed:—

Balance last audit	£107 16 6
Ores sold	141 18 0
Calls received	364 10 0
Transfer fees	3 0 0
Mine cost and merchants' bills	£1461 6 4
Collecting cheques	0 1 0
	1461 7 4

Balance in favour of adventurers £ 125 17 2

The CHAIRMAN moved the adoption of the reports and accounts; and, in doing so, was ready to answer any questions that might be put to him.

A SHAREHOLDER considered the report very satisfactory.

The resolution was then carried unanimously.

The CHAIRMAN said the next subject was to consider a resolution to call a special general meeting, for the purpose of forfeiting all shares in arrears of call.

Mr. DARLINGTON, in answer to a question, stated that the arrears only amounted to 47½ l.; and, from the character of the mine, no doubt the whole would be paid.

Mr. HALLETT moved a resolution, to the effect that a special general meeting should be called for Nov. 1, for the purpose of absolutely forfeiting all shares upon which the calls up to the present time were unpaid.

The resolution was seconded, and carried unanimously.

Mr. RYE observed that he had received instructions to purchase 40 or 50 shares at a high price, but he could only succeed in getting a very few. It was just the district that would cause a rush for the shares upon a slight improvement.

The CHAIRMAN suggested that they should make a call of 10s. per share, which would place them in a sound position.—A call of 10s. per share was then agreed to, payable on or before Nov. 3, with a discount of 2½ per cent. on all sums paid before that day.

Mr. HALLETT said stated in the *Mining Journal* last week the great objection there was to the charge of transfer fees, which, according to the accounts, only produced 3½ l. He knew the brokers generally much objected to it, as calculated to injure the mine.

The CHAIRMAN explained that the reason the resolution passed was to do away with fictitious transfers that came up from Cornwall, when they did not hold a single share. It was a very speculative mine in the county, and the course adopted had led to a great deal of trouble, and the resolution was passed merely to stop that system, which was considered injurious to the mine. It was a very good neighbourhood, and on the most trifling discovery the shares advanced 60 or 70 per cent.

Mr. RYE said he had got into a squabble about the fees which he had to pay, in consequence of principals objecting to it; and, in fact, it was generally dislaid.

Mr. HALLETT said the Par Consols was a very extensive mine, and they were obliged to abandon the charge.

A SHAREHOLDER remarked that Messrs. Watson and Cuell objected to it through the columns of the *Mining Journal*, and he considered the fee ought to be abolished.

Mr. RYE believed the mine would stand better in the market if the alteration were made. He attended the meeting at the request of Messrs. Watson and Cuell, who were unable to do so.

Mr. HALLETT proposed that the rule passed on Feb. 5, 1857, to charge a transfer fee of 2s. 6d. be rescinded.—Mr. RYE seconded the resolution, which was carried unanimously, and appeared to give general satisfaction.

A vote of thanks to the Chairman terminated the proceedings.

MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

DISCOUNT ON CALLS.—The practice of allowing discount on calls if paid within the day named is becoming a very general practice, and proved highly beneficial to the companies. All the mines in Mr. Murchison's office adopt this plan, and this week for the first time, at the suggestion of Mr. Hallett, it was allowed at North Frances, as it was considered only fair that those who paid promptly should receive an advantage over the co-adventurers who were in arrears for perhaps six months. But there are other advantages—a vast amount of trouble is saved by having only a few arrears, and the shareholders, in many cases, save the whole amount by being in a position to deal with ready money, and obtain from the merchants discount.

PROVIDENCE MINES, AND TRELYON CONSOLS.—A very important arrangement was, on Wednesday last, concluded between both these mines. The two sets of adjoint, Trelyon being on the north and west. The ends in one part of Trelyon have for some time past been worked up to the boundary between both mines; but as this part of Providence is a long way from their present workings, and, having no spare power, they could not work it without making a new mine of it, and by erection of expensive machinery, &c., which the adventurers were not disposed to do; whereas, on the other hand, it being so close to Trelyon, with the ends from that mine nearly into it, it could be worked by them with a very trifling expense. A very good arrangement for both parties has, therefore, been concluded—that is, to work the ground called Trelyon lower boundary, or Trelyon lower mine, conjointly between both, each paying half the costs, and each taking half the tin, or any other produce therefrom. The part to be drained by means of a rod from Trelyon engine. This piece of ground has long been thought very much of, as considerable quantities of tin have been sold from the old burrows at surface. And while the results will probably be of great importance to Providence, this arrangement has more than doubled the value of Trelyon, and is of the utmost importance to that mine, as their returns may now be expected to increase.

WHEEL KITTY (Leland) looks well: the four ends recently resumed into the united ground (Kitty and Mary) are all opening very good ground,—some that will work at 2s. 6d. in 11. Other parts of the mine are also very promising.

GREAT RETALLACK MINE.—The orange ochre found at this mine, and alluded to in last week's *Journal*, has been tested by one of the most eminent houses in the colour business in the metropolis, and by one of the largest consumers in the North of England. The result, as was expected, was most satisfactory, as in each instance the colour was declared of superior quality, and orders have been forwarded for a supply. This, it is to be hoped, will encourage the young men, the workings of which are carried on by a company of four individuals only. The mine was inspected by Mr. Henwood, who declared the gossan to be a valuable pigment, and whose report stated his opinion was that as soon as the floor of spar then in the shaft should have been passed through, and that would be quickly, the lode would be found more productive, and of better quality. This has been effected, and a fine lode of nearly metallic iron discovered, as predicted.

NORTH DOLCOATH.—Copy of assayers' report of sample from North Dolcoath.—The small specimen of argentiferous gossan has been carefully assayed for Messrs. Vivian and Reynolds, and produces 1 oz. 4 dwts. 12 grs. of pure silver, which gives a proportion equal to 3 oz. 5 dwts. 8 grs. to 1 lb. weight of such ore. A careful assay has been made of the remaining specimen of gossan, which gives a proportion of fine silver equal to 106½ ozs. to the ton of ore.—JOHNSON AND MATTHEY, Assay Offices, Hatton Garden.

TIN STEALING AT PEDN-ANDREA MINE.—For some time suspicion has been excited that the tin stores at this mine had been robbed, but detection had been impossible. Last week a watch was set, when a little after 8 o'clock in the evening four men, with a horse and cart, were detected in the very act—one having a bag of tin on his shoulder. They had taken about 8 cwt. of black tin (that is, tin ore in its marketable state), worth about 25l. The robbers turned out to be the landlady of a public-house at Redruth, a person who keeps a set of tin stamps, and buys bargains of tin stone, the man who has charge of the burning-house, and a person who appears to have been employed to carry off the tin. Suspicion had been excited by the circumstance of the burning-house man being able to lend out at interest various sums of 30l. and 40l. at a time, whilst he had only held the situation about 15 months, and his wages no more than about 3l. 19s. per month. The knaves had laid their plot well, as the tin-dresser, carrying a lot of tin to the smelting-house, would have been supposed to have procured it in a legitimate manner at his own stamps. No doubt this system of wholesale plunder has been practised for some time, and to a great extent. The discovery will, we presume, cause the adoption of more stringent measures for the protection of such valuable property at Pedn-andrea and other mines. Instances so barefaced as this are of rare occurrence in the county. The four men have been examined and committed to the County Jail, for trial at the Assizes, when they, no doubt, will receive a sentence sufficiently severe to deter such attempts for the future. The shareholders in Pedn-andrea Mine may well have complained that the yield of tin was sadly short of the representations of the agents, when their property has been exposed to such gross depredations.

These rogues who, like the besom stealer who chose to have them ready for the market, preferred taking the tin when dressed (a most expensive process) to carrying off the ore as raised from the mine. The position of the two individuals in society has caused great surprise, as they were each in a supposed good way of business, and looked on as respectable tradesmen.

BROXBACH MINE.—A letter from Darmstadt gives a deplorable account of the present management of this mine, which, it appears, fall by some means, to be hereinafter mentioned, into the possession of two individuals from London: one a mercantile gentleman, the other connected with the office of a late solicitor in Broad-street. Any attempt to work mines without capital, on mere adventure, and particularly foreign mines, leaving the unfortunate miners who trust to English probity without that substance they have a right to expect for their labour, is highly culpable, and tends to bring the whole mining system into discredit.

ASHBURNTON UNITED MINES.—Persons interested in the success of mining in this district will be pleased to hear that a 56-in. cylinder engine has been started at the United Mines, under auspices of such a character as are rarely to be met with. The mines in question are well known to be the Wheel Vor of Devon, having made such returns in the olden time as to maintain, with a few other small concerns, an entire smelting establishment, and that at a depth scarcely exceeding the advantages afforded by ordinary adit levels. The depth of the mine is only 55 fms. below adit, and was attained by water-power, under circumstances of great difficulty and enormous outlay. The present company have erected a steam-engine of sufficient power for developing the mine to an extent warranted by the certainty of success; and, judging from the expedition and energy shown during the past few months, when the set came into their possession, it may be fairly presumed that the mine will be in full work by Christmas of this year; and that the quality work producing from the shallow levels will also enable them to prepare for market 20 tons of tin, besides a valuable parcel of copper ore, by the same period. The engine was started on Monday last, and moved off to the entire satisfaction of those present. It was erected under the superintendence of Mr. W. H. Gray, of St. Austell, and is considered only as the pioneer to many others yet to follow under the same direction and to the infinite advantage of the inhabitants of a district teeming with mines, requiring development only to class them amongst the best in the West of England.

THE CRAVEN MOOR MINES are improving, and the company are making rapid progress; they are dressing from 20 to 30 tons of ore per month, and the present appearance of the mine promises that the company will be well rewarded for their great perseverance in carrying out such an undertaking.

THE STONEY GROVES COMPANY have cut into a vein of ore from 18 to 20 in., nearly solid. This is a private company. The sett is bounded by the Merryfield to the west, and the ore has been found on the boundary between the Merryfield and Stoney Groves. About 13 tons have been smelted, which yield a good produce.

LEWIS MINES.—An important improvement is announced here, and a full report on the mine will be given next week.

WENDRON CONSOLS.—At the meeting of shareholders, held on Sept. 21, it was unanimously resolved:—That Mr. Peter Watson's office in London be an office of reference for this mine. Some very large and rich specimens of tin have been received at Mr. Peter Watson's offices this week from the different lodes, and he invites shareholders and others to view the same. The mine looks well, and increased dividends are expected. Capt. John Taylor has been appointed manager.

NORTH TRESKERRY MINE progresses as rapidly as the works can be prosecuted. Several transactions in shares of the mine have taken place at a premium. We regret to learn that Capt. J. Rabey, the manager, has been suffering severely from a cold, caught whilst exploring the old and wet adits of the mine. Stones of good copper ore are being raised, and the mine is almost daily visited by enquiring mining gentlemen of their agents. Nothing can be finer than the gossans and appearance of the level adits, or the ground in which these lodes are situated.

AT WHEEL SIDNEY, the captain reports the prospects of the mine to be most encouraging. The new shaft is now down about 20 fms. The sampling is progressing favourably.

DEVON AND COURTNEY.—The lode in the end driving west, in the 100, is 4½ ft. wide, and on the whole, looking much better. They will not be long before they get under the ore ground in the 90, which will open up good work. The lode in the 80 will turn out full 3 tons of ore per fathom.

THE PORKELLIS UNITED MINES will be submitted for sale by auction, on Tuesday next, by Messrs. Gadsden, Winterford, and Ellis. The mines are situated on Wendron Moors, near Helston, and with the whole of the materials and machinery will be put up in one lot, including a 60-in. cylinder steam pumping engine, with two boilers and fittings complete, a steam winding and stamping engine, 80 steam stamp head and every requisite for working a large tin mine. The sett is held for 21 years, from 1851.

TRESAVERN MINE.—We understand that the number of applications for shares in this mine far exceeds what the projectors anticipated, several of the most influential of the Cornish mining capitalists having indicated their intention of joining the venture. We are informed that the number of shares to be issued is 200,000, at 4s. per share to be paid up at the time of subscription. There is little doubt but that at the first meeting every share will be allotted. Works have already been commenced, and ore is being raised. The captain confidently affirms that he shall not require more than half the capital named; but those who are acquainted with mining must know that it is better to have ample capital at once than to have recourse to votes for a second grant to work the mine vigorously. Few prospectuses, comparatively speaking, have been issued.—Capt. Wm. Martin being so well known as one of the most skillful miners in Europe, renders his bearing on so celebrated a mine a work of little difficulty.

It is probable that the mine will be opened in the near future, and the Cornish papers and the *Mining Journal*, to be held on the mine, at which all preliminaries will be settled, and the mine set to work forthwith.

AT LADY BERTHA, a further improvement has taken place, the lode in Carter's winze being sunk out 200 ft. per fm. In the 30 west they have about 2 fathoms more to drive before cutting the lode.

NANGILES MINE.—This mine has been worked some time for sulphuric mudic ore. The workings are now suspended; it is said the prices are not sufficient to induce further prosecution. This is to be regretted, as in prosecuting these works considerable chances of discovery are afforded. Manganese ore which contains from 2 to 3 per cent. for copper seem to be preferred by the purchasers, and for these qualities there is a ready sale. Considerable quantities of blende are procured in this locality, and a market is found for it at a fair price.

ST. DAY UNITED MINES.—A splendid lode of tin has been cut here, at Polidice, in the 150 ft. level. This is a great discovery for these mines, and will tend much to increase their value. On the whole, the tin interest at present is doing better than the copper, and tin mines command a higher figure than others. The price for tin seems to be steady, and the demand good.

HENWOOD'S NEW JIGGING MACHINE.—Capt. W. Martin, of Tresavean Mine, Capt. Pascoe, late of Great Wheel Busy, Capt. A. Bennetts, of Carn Brea, and other eminent practical miners, have this week examined the model of this machine. They all pronounce it to be the most effective, practicable, simple, and cheapest yet introduced. They concur in opinion that it imitates hand labour as perfectly as may be desired, or is possible, whilst it diminishes the cost by three-fourths at least, and that it fully answers the purposes for which it is intended; that any sizes of ore may be treated, from the finest copper bottoms to coarse ragging. Mr. Henwood proposes submitting it to the inspection and opinions of the agents of some of the large Camborne mines this week, after which it is likely one will be erected of the full size, to test its practical value and efficiency.

ST. DAY UNITED MINES.—We noticed these mines in our *Journal* last week, stating that a large outlay had been expended upon Polidice, and that the adventurers were about raising the reward of their perseverance, inasmuch as they were happy to find that the mine was worth from 40l. to 50l. per fm., and he has every reason to believe it is from 60 to 70 fathoms long and no level driven under it. In about a fortnight they will commence driving the 144 under the other levels, and immense deposits of tin are anticipated.

NORTH DOLCOATH.—A sample of the lode recently discovered in this mine has been assayed by Messrs. Johnson and Matthey, and found to contain 106½ ozs. of pure silver to the ton of ore. This sample was a fair average of that part of the lode from which it was taken.

TRESAVERN MINE.—Active measures are being taken here to get the mine to work: sawyers, carpenters, smiths, &c., are busily employed. A new winze is being fixed at Bray's shaft for hauling timber work, a large party having been set on. Several tribute vessels the company have been in other parts, and the mine promises soon to resume at least a portion of the industrious character it once enjoyed. Immense numbers of miners have been at the mine seeking employment. As soon as the sales shall have been completed, and the materials removed, the new company will begin to operate more extensively.

BRYNTAL MINE.—In this mine a great improvement has recently taken place. The lode in the 10 fathom level is yielding 2 tons of ore per fathom.

The Cornubia new iron sten-boat, which plies between Hayle and Bristol, encountered a tremendous sea in the Bristol Channel on the night of the 6th inst. The *Cornubia* is the fastest and most splendid boat on this line. She reached her destination in safety, after a fearful passage, many times being in imminent danger, and avoiding a collision with a large brig, without lights, by only a few feet, when all must have perished. Mr. John Brown, of hawcraze, the well-known and much-respected mineral agent, had a narrow escape lived. Being unable to remain in the cabin, he got into the engineer's room, where he lay in the bunk, placing his overcoat, containing a large sum of money, under his head as a pillow. He was disturbed by a tremendous sea breaking up the floor of his apartment, when leaping out of bed in the dark he fortunately stepped on the only bit of wood that was left, or he would have gone through to the paddle-wheel; as it was, he had no time to think of cost or money, nor dare he again enter the place to seek for the money he had taken possession of all on board. Several tributes the vessel to go down. Mr. Brown was compelled to remain in his cabin for four hours, when he requested sailor, as a hopeless case, to ascertain if his coat were still in the place he left it. The sailor found it, washed out of the bunk, and partly through the hole; it had, however, fortunately for Mr. Brown, got entangled, and he thus recovered his treasure, though not without considerable suspense and alarm.

ROSEWARNE UNITED.—A typographical error occurred in the extract we gave last week from Mr. Murchison's *Review*. It was stated that the second cross-cut in the 58 was "100 fms." from the first; it should have been "10 fms." We understand the mine is considered to be better than it has done for two years past.

REETH CONSOLS.—The sale materials will take place on Monday, Oct. 18, at eleven o'clock, and not Tuesday, Oct. 19, as advertised last week.

ROYAL SANTIAGO MINING COMPANY.—In the event of this company being wound-up, it is fully expected that property will be bought by the Cobre Company, as from their position they would, no doubt, give a better price than other parties. Notwithstanding all the misfortunes of the Santiago Company, the original shareholders, of whom there are several, have been amply remunerated for their outlay.

CLARENDON OF JAMAICA.—The whole of the machinery necessary for thoroughly testing the property has been sent out, arrived safe in the colony, and is expected to be in full working operation the end of the year, when ore will be sent to this country. The shares, although 3s. in price, are very firmly held, principally by parties interested in the welfare of Jamaica, and the great importance of successful mining in any part of the world. The neighbourhood of the mine, which a few years ago was a barren waste, now presents cheerful villages, the coloured population willingly accepting employment.

MINING MARKET.—We have received the following communications:—

FROM MR. JAMES CROFTS.—If the *lectures* of the *Journal* will take the trouble to refer to the letter of the writer of last week, there will be found a discussion on the probability, or otherwise, of the Bank of England reducing the rate of discount, the object of the reasoning employed being to disabuse the public mind as to the probabilities of such a step on the part of that institution; and now, they having allowed another ominous Thursday to pass over without reducing their rate, it is presumed that the question is a settled one, for this year at least, since the value of money out of doors and in the Bank approximating more closely every day, there no longer exists the necessity of any change on the part of the Bank. The subject to an extent possesses great interest, because inferentially a higher rate for money will, in the present state of affairs and commerce, become an evidence of the gradual amelioration of all branches of industry, and at favourably, therefore, on all markets. To prove this position, it is only necessary to note the great increase of business in all departments on the Stock Exchange demonstrating that the worst period of the year has now passed away, and is supplanted by a cheerful tone, which cannot fail to progress satisfactorily until it again reaches absolute, and it is to be hoped sound, prosperity.

On the mining market, to which the writer, he it understood, devotes his almost exclusive attention, the influence of the preceding circumstances had been very sensibly felt, in an advance in particular upon every well-established dividend mine, such as (to cite those who stand at the head of the list) Providence, Mary Ann, Wheel Margate, Trevelyan, Tincroft, West Basset, the Caradons, and some others, for which there is a continuous demand; whilst in progressive mines there has been notable improvement also, as in Lady Bertha, Wheel Creakle, East Wheel Russell, St. Day United (occupying an erroneous position in the Dividend List), Vale of Towry, and Rosewarne United; whilst, strange to say, Pendennis, Wheel Harriet, New and Old Trevelyan, and West Grenville, so lately special favourites, scarcely exhibit signs of life, and are yet all assumed to be not only cheap but safe shares. The constantly upward course of Bryntal does high credit to the predictions some time ago hazarded of its value by a large holder, the shares having advanced from absolutely nothing to 4½, or thereabouts, buyers, and are expected to go much higher.

The shares in North Mines have also undergone a reaction in price, owing probably to (and to that cause alone) of holders of shares at the par price (2½) realising handsome profits, a wise act at all times in mining shares; at the moment, however, the market appears nearly cleared of shares, and they leave off firm in price at a reduction of 20s. to 30s. from the highest point. The news from the mine continues of a highly satisfactory character, and if there exists lead ore working, or in sight, throughout the mine to the aggregate extent of 12½ tons per fathom, and 20 to 25 tons in course of sampling for sale this month, as is reported, the mine, in 1000 shares only, is the cheapest, probably, in the whole range of newly-opened speculative concerns. As a corollary to this subject, similar circumstances have taken place in Old Tolgu United, i.e., the price of the shares has fallen without an adequate or any reason affecting the property itself, and the public will do well to avail themselves of the present moderate price of these shares; for one strong reason, amongst others, that the lode in the 40, which it is confidently anticipated will yield a course of ore, may be cut in about six weeks from the present time, and, if rich, the shares would rise to a very high level. The highest and lowest of these shares has been between 100l. and 8l. or 10l. per share, the majority of those in original hands having cost, however, the higher price. It cannot be too often repeated, because no more important item can exist in the statistics of any mine than a small number of shares, that Old Tolgu United is at present only in 600.

A contemporary writer notices the results of a late visit by a number of practical parties to Wheel Adams, near Exeter, where the returns of lead and blende are now being made more than sufficient to meet the monthly cost, rich specimens of ore, which, it is stated, can be seen at the office of the mine. Undoubtedly great expectations are put forth, and apparently on safe grounds, of this property proving, sooner or later, highly remunerative, and at present the shares are low in value. Holmbush still "drags a slow length along," and some shareholders, worn out by the repetitions of calls, show an inclination to sell out, first paying all calls due, at a nominal price. Wheel Arthur is reported favourably upon; the eastern end producing rich stones of copper ore, and likely to improve. Of Wheel Edward, Sortridge Consols, and Great Wheel Alford, nothing very definite can be stated, except that the latter, which is an artificial support which at one time converted them into greenhouse plants, they have seen of what is apparently a perfectly safe price to invest in. They are all, in the significant words of the word, "Mines," possessing the necessary adjuncts for working, and all out of the way. An erratum must be noticed in the price of Wheel Edward shares, quoted in the *Table* last week as 27½, instead of 2½; and in Wheel Basset, 21 to 26—the price of the latter being about the same as a year ago—200 to 210, which is necessary to allow for the sake of accuracy. On the whole, it must be stated that in progressive mines the demand is still limited, being, in fact, confined to such as exhibit improvements in the lodes, and already enumerated. The Cornish mines, however, are in a position to be sold, and their conversion into a mine in 6000 shares, with all its machinery complete, and productive lodes, is noticed with a view of recommending a mine upon which 4½ s. per share has been expended; whilst the price of the ore share is only 20s. We understand that the shares, or the majority of them, are most respectably placed, and the management is in most efficient and experienced hands.

FROM MR. JOHN ROBERT PIKE.—The market for the negotiation of British Mine Shares is, as a rule, distinguished by an irregular and spasmodic action. In periods of great monetary pressure this peculiarity is not so much noticed, owing to the weakness and paucity of transactions recorded; whilst, on the other hand, in times when money is both abundant and obtainable, it becomes a prominent, and occasionally a rather disagreeable feature to that portion of the general public who, having no previous acquaintance with this description of security, cannot comprehend by what principles of sound trading, and in the absence of any public event of exciting and general application, the shares of any particular mine in which they are desirous of investing can advance in the course of a single day to double, and often quadruple, their previous value, and in a great many instances even refuse to be comforted, by the very obvious explanation that, whilst a falling off in the yield of ore in a lode or vein produces a corresponding fall in the value of the shares, on the other hand, a fresh discovery of ore, or a sudden increase either in the richness or quantity of metal in a lode, must necessarily cause an advance in the market value of the shares they represent, such rise or fall being in exact proportion to the increase or decrease in the value of the property. These facts cannot be too forcibly or authoritatively pressed on the attention of the public, as we are frequently misled by the speciousness of the arguments which are advanced, and are frequently most unjustly charged with raising and depressing the price of shares to suit their own convenience, when such fluctuations are not only beyond their control, either individually or collectively, but are the necessary effects of the causes we have specified. Apart, however, from all questions of a general nature, the present condition of the mining market is decidedly exceptional, as regards its general aspect; but not so when its position is considered in relation to the phenomena presented by the other markets for the purchase and sale of recognised securities.

The recent commercial panic, the inevitable result of over-extended credit, which has passed over both hemispheres, and our country, its track marked by depression and prostration, has been severely felt in the British Mining Market, sensitive and dependent as it always is to the fluctuations in the values of money and corn. When the effects of these two commodities became too dear to purchase for home use, the various share markets in this metropolis were completely paralysed; commercial failures almost unparalleled in their number, extent, and ramifications, caused quantities of shares to be forced for sale at whatever price could be realised, thus unduly depreciating the market value of many securities to an extent which could hardly be credited without investigation. It might have been expected, that when the immediate effects of such an unusual state of things had been ascertained, and the metallic currencies of the principal trading communities of Europe and America had subsided into their natural dimensions, and reciprocal worth, that a revival of trade would immediately have ensued, bringing in its train national prosperity and wealth, a result which would have been justified by precedent, and was undoubtedly anticipated. Such, however, has not been the case. A great has been the shock which public confidence has received, that with money at a price all but nominal, millions have been for many months steadily hoarded by the public; valueless, because unemployed, commerce droops, and from the humble out to the lordly palace goes forth the cry of distress and despair.

That such an abnormal state of things could not be of long continuance was palpably to every one acquainted with our national necessities and resources. Already an improvement in the tone of public confidence is visible in the steadily increasing supply of money sent into the mining market for investment, which, acting on securities unduly depressed, results in a corresponding upward tendency; this is sufficiently apparent even now to cause public surprise without explanation, but will be easily understood when we state that we could point to several mines raising sufficient ore to pay their working cost, and progressing to a dividend condition, the shares in which are now very considerably below the value of the lodes, and the general state of the property. Such shares as these must rise, and that rapidly, to the level of the worth in proportion to the general activity of the market. Already have a few mines advanced thus in value, and as our principal object is to contribute to a return of healthy confidence on the part of the public, we are anxious that the present exceptional state of the mining market should be well understood, so that any rapid advance in share values may be rightly appreciated and referred.

FROM MR. RICHARD TREDENNICK.—The mining share market has shown considerable activity during the week, and transactions have been large and numerous both in dividend and sound progressive shares. Basset shares are in request at 20s. 20s. Bryntal, 3½ to 3¾, closing purchasers at 4 to 4½; the prospects are much improved of late, and it is probable that a further advance in price will follow. Basset demand, at 5 to 5½, with an absence of sellers. West Grenville is a promising venture; the adit end west, on Field's lode, yields 1 ton of rich copper ore per fm. Mr. Crofts, the seller, at St. Grenville is looking kindly at the shaft at Newall, where Buller and Basset United have been largely dealt in; the lode is said to hold out the chances of success at no very distant date; it is 4½ ft. wide, and mineralised throughout. Great South Tolgu, South Tolgu, and Old Tolgu United, are each good to purchase at 100 to 110; the ores are rich in quality, and the costs of production contracts favourably against yields. At Old Tolgu United, the 32 west, on the engine lode, yields 5 tons of copper and blende per fathom. In the 32 east, 6 tons. On the engine lode west, 1 ton of copper. In the 32 west, on south lode, 1 ton of copper. In the 32 east, 1 ton of copper. In the 32 west, on the shoot of ore, yielding 5 tons of copper ore per fathom. (Note down in the 32 fm. level.) Margery shares at 10, 9½, 9; the mine is reported to be expensive to work, and, notwithstanding large and increasing returns, costs of production increase in proportion, whilst rumour asserts a larger and more powerful pumping-engine will soon be required. Providence continues to open out well, and dividends of 4l. quarterly will be resumed now that the extra expenses of additional machinery are defrayed. Margery shares have been in great request, and close at improved prices. Great Wheel Vor shares are flat, and in the absence of buyers the market was a very weak tendency. This mine, formerly so very productive, and now reported as a very heavy expenditure, must be worthy the attention of capitalists at the heavy price now stable at. Great Wheel Busy, 2½, should be purchased, the prospects of ore are good, and notwithstanding the disappointment of not finding an old adit of usual mine rich upon the water being pumped out, mining authorities assert, with some confidence, that development in depth, and cross-cutting to side lodes, will yield very important results. It was absurd to expect profits at first; perseverance in the present system of operations, and success will soon follow. *Nil desperandum* is the motto as hope should be the talisman of mining.—Friday, 8½ to 9 o'clock.—A telegram from Old Tolgu United, reports the 32 east and west on south lode, has improved. A statement in shares this day has passed off satisfactorily, and without a single defective.

THE BRITISH POSTAL GUIDE.—A correspondence has taken place between the Post-office and Sir C. Roney, in consequence of the price of this useful little book being raised from sixpence to a shilling. The latter contends that there is no reason in the cost of its production to justify the selling price being doubled. The Post-office department admits, in answer, having disposed of the right of publication to private parties, and justifies the proceeding as advantageous to the public. This is an argument that can hardly be expected to meet general concurrence.

A petition has been presented at the Court of Bankruptcy for a winding-up order against the North Lincolnshire Shipbuilding Company, and will be heard on Oct.

FOREIGN MINES.

EASTERN POLYTECHNIC INSTITUTION.—We have much pleasure in recording the opening, in the premises known as the Garrick Theatre, Leman-street, Whitechapel, of a Polytechnic Institution, under circumstances which warrant the expectation that that densely populated district will possess permanently, in its midst, all the advantages which have hitherto been confined to the extreme west of London. In the early stage of so praiseworthy an enterprise it is not, of course, possible to present the merits, &c., which form so interesting a feature in the Royal Polytechnic; but lectures, instruction, and amusing, and that class of entertainments latterly so popular both in the Colosseum and Western Polytechnic, have most worthily and effectively inaugurated the undertaking.

The manager, Mr. J. D. Malcolm, so well known in the West, introduces his delightful lecture on Natural Magic, with experiments. Mr. Lemoux Horn follows with his lecture on the Humorous Melodies of Old England, with spirited songs by way of illustration, and a beautifully executed series of astronomical dissolving views, leading up to the comet, fulfil the promise that popular science will not be overlooked amidst the lighter class of entertainments. Mr. Malcolm's intimation, that should the experiment now being made prove satisfactory a building in all respects worthy of the important district of the Tower Hamlets would be erected, was received so heartily as to encourage the hope that the Eastern Polytechnic Institution will become a great and permanent fact; and we trust that the influential employers, and others in the neighbourhood, will afford it every countenance and support.

lores Level : After having 5½ varas further east the eastern side of the cross-
road No. 3 was reached. This disturbing influence is from 16 to 18 ft. wide; its di-
rection south-east and north-west, with an inclination of 3½ ft. in 6 to the east. The
slope being cut through, the end was turned as quickly as possible south on its
course, and 8 varas driven thereon by six men, at 57 per vará, making a total, including
the 5½ varas already driven, of 13½ varas. From the immense stream of water issuing
above 5½ ft. of 13½ varas. From the immense stream of water issuing from the
at the end the vein, I should think, cannot be more than 100 ft. off. In making a
of ores level, the branch here improves very much during the month; it is at present
thick, at the western part, for ½ varas in length, 10 cwt. of rich ore per fathom. For
early portions of the month two men and two boys have been engaged in this back,
during the last fortnight only one and a boy have been employed. The ground con-
sisting of very hard, consequently our progress is slow. The ore branch before alluded to,
very advantageous, will in a short time make itself for the whole length of the

WADEBRIDGE.—The Camel Slate Quarry has recently so much improved the slabs (some from 120 to 140 ft. in a stone) and roofing are of a very superior quality. It is, therefore, more than probable that the adventurers in this concern will be amply remunerated for their perseverance and heavy outlay. And considering the large quantities in this country, and the supply of material required, necessarily with men success, because not only is the neighbourhood in which the quarry is situated materially benefitted, but also the country generally, preventing as it does that monopoly which has for some years been attempted in the Cornish slate trade.—*Plymouth Journal*.

consent to allowing the mine to be deeply in debt, and when a certain amount was due they must make a call to meet it. He wished it to be distinctly understood that Mr. Verran came up on his own business, and not at the request of the directors.

Mr. WATSON proposed a vote of thanks to the Chairman and directors, which was seconded, and carried unanimously.

NORTH WHEAL FRANCES MINING COMPANY.

The bi-monthly meeting of adventurers was held at the offices of the company, Cannon-street, on Thursday. Mr. CHARLES HUNT in the chair.

Mr. DARLINGTON read the notice convening the meeting, and the minutes of the last, which were confirmed.

The reports of Capt. Moyle and Mr. Garland were next read, as follows:—

Oct. 8.—Since the last general meeting, Eales's shaft has been sunk 5 fms. 3 ft. below the 60; in sinking the last 3 feet the water has been coming from the south side of the shaft, where we expected to find more of the lode. By blasting a hole south we discovered the main part of the lode, of a very soft spar, peach, and stains of black ore, being 2½ ft. wide, of a very promising appearance, with a regular south wall, which has not been seen from the 48 to the present depth until yesterday; my opinion is that it is the part of the lode that made off south in the 48, and is come in again. The 60, which was commenced driving west of Eales's shaft the beginning of last month, by four men, is 6 fms. west—present price 37. per fm.; the lode is divided into three branches. I have no doubt but that the main part of the lode is also south, as in the shaft, which will be proved by driving on a little further, as the branches seem to bear south of west towards the main part of the lode in the shaft; there is a very promising white stratum of granite in this end for mineral. The 36, west of Eales's, is driving by six men, at 54. per fm.; 15 fms. have been driven since the last meeting, being now altogether west of Eales's shaft 102 fms., we estimate about 8 fms. to cross-course; the lode is 2½ feet wide, composed of capels and hard spar—unproductive; the ground has been very hard for the last month, but is changing for the better. Hunt's shaft is sinking under the surface by nine men, at 117. 10s. per fm., and is being sunk 17 fms. under surface; we have the cross-course in the shaft, and I can calculate with more certainty its position. To communicate this shaft with the 36 we have to drive (after we cut the cross-course) about 45 fms. on the cross-course south, and sink the shaft 45 fms. deeper; by the present appearance of the ground it will take from 12 to 14 months to communicate. As Hunt's shaft and the 36 end are the main points now in operation to communicate to reach the object in view, we are urging on all the speed we possibly can to intersect the south lodes, and I have a very strong opinion that when we get at these lodes under the hills into the granite which runs parallel with North and West Basset Mines, they will prove productive, and as the lodes here have not been developed at the depth these mines are, where the main bunches of ore have been found, I consider there is little to fear, but everything to hope for, therefore I beg to advise perseverance. I would also lay before you that we may expect a large increase of value at Hunt's shaft as soon as the mine set in, and to expedite the shaft it would be advisable to prepare a line of rods from the engine to Hunt's shaft, which is about 160 fms.—JOHN MOYLE.

Oct. 13.—For the information of the shareholders to-morrow, I beg to say that the discovery which is reported at North Frances is not of ore, but of the south part of the lode, and evidently the main part, which in the disordered ground about the 48 dipped to the south, but is now come into the shaft; it is 2½ ft. big, and a kindly lode. The part of the lode in which we were sinking is joining it in the bottom of the shaft, so that we shall now sink quicker, as the new part of the lode is much fairer. We are also turning the end south in the 60, and expect we have there about 9 ft. to cut the south part, on which we shall then drive. Instead of a few small poor branches to sink and drive upon, we have now a large, well-defined, and promising lode.—T. GARLAND.

A statement of accounts, from Aug. 3 to Oct. 14, was exhibited, from which the subjoined is condensed:—

Balance last audit	£1077 16 6
Ores sold	141 18 0
Cash received	364 10 0
Transfer fees	3 0 0
Mine cost and merchants' bills	£1461 6 4
Collecting cheques	0 1 0
	1461 7 4

Balance in favour of adventurers £125 17 2

The CHAIRMAN moved the adoption of the reports and accounts; and, in doing so, was ready to answer any questions that might be put to him.

A SHAREHOLDER considered the report very satisfactory.

The resolution was then carried unanimously.

The CHAIRMAN said the next subject was to consider a resolution to call a special general meeting, for the purpose of forfeiting all shares in arrears of call.

Mr. DARLINGTON, in answer to a question, stated that the arrears only amounted to 477. 10s.; and, from the character of the mine, no doubt the whole would be paid.

Mr. HALLETT moved a resolution, to the effect that a special general meeting should be called for Nov. 1, for the purpose of absolutely forfeiting all shares upon which the calls up to the present time were then unpaid.

The resolution was seconded, and carried unanimously.

Mr. RYE observed that he had received instructions to purchase 40 or 50 shares at a high price, but he could only succeed in getting a very few. It was just the district that would cause a rush for the shares upon a slight improvement.

The CHAIRMAN suggested that they should make a call of 10s. per share, which would place them in a sound position.—A call of 10s. per share was then agreed to, payable on or before Nov. 3, with a discount of 2½ per cent. on all sums paid before that day.

Mr. HALLETT now stated in the *Mining Journal* last week the great objection there was to the charge of transfer fees, which, according to the accounts, only produced 37. He knew the brokers generally much objected to it, as calculated to injure the mine.

The CHAIRMAN explained that the reason the resolution passed was to do away with fictitious transfers that came up from Cornwall, when they did not hold a single share. It was a very speculative mine in the county, and the course adopted had led to a great deal of trouble, and the resolution was passed merely to stop that system, which was considered injurious to the mine. It was a very good neighbourhood, and on the most trifling discovery the shares advanced 60 or 70 per cent.

Mr. RYE said he had got into a squabble about the fees which he had to pay, in consequence of principals objecting to it; and, in fact, it was generally disliked.

Mr. HALLETT said the Par Consols was a very extensive mine, and they were obliged to abandon the charge.

A SHAREHOLDER remarked that Messrs. Watson and Cuell objected to it through the columns of the *Mining Journal*, and he considered the fee ought to be abolished.

Mr. RYE believed the mine would stand better in the market if the alteration were made. He attended the meeting at the request of Messrs. Watson and Cuell, who were unable to do so.

Mr. HALLETT proposed that the rule passed on Feb. 1857, to charge a transfer fee of 2s. 6d. be rescinded.—Mr. RYE seconded the resolution, which was carried unanimously, and appeared to give general satisfaction.

A vote of thanks to the Chairman terminated the proceedings.

MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

DISCOUNT ON CALLS.—The practice of allowing discount on calls if paid within the day named is becoming a very general practice, and proved highly beneficial to the companies. All the mines in Mr. Murchison's office adopt this plan, and this week for the first time, at the suggestion of Mr. Hallett, it was allowed at North Frances, as it was considered only fair that those who paid promptly should receive an advantage over their co-adventurers who were in arrears for perhaps six months. But there are other advantages—a vast amount of trouble is saved by having only a few arrears, and the shareholders, in many cases, save the whole amount by being in a position to deal with ready money, and obtain from the merchants discount.

PROVIDENCE MINES, AND TRELYON CONSOLS.—A very important arrangement was, on Wednesday last, concluded between both these mines. The two sets adjoint, Trelyon being on the north and west. The ends in one part of Trelyon have for some time past been worked up to the boundary between both mines; but as this part of Providence is a long way from their present workings, and having no spare power, they could not work it without making a new mine of it, and by erection of expensive machinery, &c., which the adventurers were not disposed to do; whereas, on the other hand, it being so close to Trelyon, with the ends from that mine nearly into it, it could be worked by them with a very trifling expense. A very good arrangement for both parties has, therefore, been concluded—that is, to work the ground called Trelyon lower boundary, or Trelyon lower mine, conjointly between both, each paying half the costs, and each taking half the tin, or any other produce therefrom. The part to be drained by means of a rod from Trelyon engine. This piece of ground has long been thought very much of, as considerable quantities of tin have been sold from the old burrows at surface. And while the results will probably be of great importance to Providence, this arrangement has more than doubled the value of Trelyon, and is of the utmost importance to that mine, as their returns may now be expected to increase.

WHEAL KITTY (Lelant) looks well: the four ends recently resumed into the united ground (Kitty and Mary) are all opening very good ground,—some that will work at 2s. 6d. in 11. Other parts of the mine are also very promising.

GREAT RETALLACK MINE.—The orange ochre found at this mine, and alluded to in last week's *Journal*, has been tested by one of the most eminent houses in the colour business in the metropolis, and by one of the largest consumers in the North of England. The result, as was expected, was most satisfactory, as in each instance the colour was declared of superior quality, and orders have been forwarded for a supply. This, it is to be hoped, will assist this young mine, the working of which is carried on by a company of four individuals only. The mine was inspected by Mr. Henwood, who declared the gossan to be a valuable pigment, and whose report stated his opinion was that as soon as the floor of spar then in the shaft should have been passed through, and that would be quickly, the lode would be found more productive, and of better quality. This has been effected, and a fine lode of nearly metallic iron discovered, as predicted.

NORTH DOLCOATH.—Copy of assayers' report of sample from North Dolcoath:—The small specimen of argentiferous gossan has been carefully smelted for Messrs. Vivian and Reynolds, and produces 1 oz. 4 dwts. 12 grs. of pure silver, which gives a proportion equal to 3 oz. 5 dwts. 8 grs. to 1 lb. weight of such ore. A careful assay has been made of the remaining specimen of gossan, which gives a proportion of fine silver equal to 1064 ozs. to the ton of ore.—JOHNSON AND MATTHEY, Assay Offices, Hatton Garden.

TIN STEALING AT PEDN-AN-DREA MINE.—For some time suspicion has been excited that the tin stores at this mine had been robbed, but detection had been impossible. Last week a watch was set, when a little after 8 o'clock in the evening four men, with a horse and cart, were detected in the very act—one having a bag of tin on his shoulder. They had taken about 8 dwts. of black tin (that is, tin ore in its marketable state), worth about 25s. The robbers turned out to be the landlord of a public house at Redruth, a person who kept a set of tin stamps, and buys bargains of tin stone, the man who has charge of the burning-house, and a person who appears to have been employed to carry off the tin. Suspicion had been excited by the circumstance of the burning-house man being able to lend out at interest various sums of 30l. and 40l. at a time, whilst he had only held the situation about 15 months, and his wages no more than about 37. 10s. per month. The knaves had laid their plot well, as the tin-dresser, carrying a lot of tin to the smelting-house, would have been supposed to have procured it in a legitimate manner at his own stamps. No doubt this system of wholesale plunder has been practised for some time, and to a great extent. The discovery will, we presume, cause the adoption of more stringent measures for the protection of such valuable property at Pedn-an-drea and other mines. Instances so barefaced as this are of rare occurrence in this county. The four men have been examined and committed to the County Jail, for trial at the Assizes, when they, no doubt, will receive a sentence sufficiently severe to deter such attempts for the future. The shareholders in Pedn-an-drea Mine may well have complained that the yield of tin was sadly short of the representations of the agents, when their property has been exposed to such gross pilage.

These rogues who, like the beam stealer who chases to have them ready for the market, preferred taking the tin when dressed (a most expensive process) to carrying off the ore as raised from the mine. The position of two of the individuals in society has caused great surprise, as they were each in a supposed good way of business, and looked on as respectable tradesmen.

BROXBACH MINE.—A letter from Darmstadt gives a deplorable account of the present management of this mine, which, it appears, fall by some means, to be hereinafter mentioned, into the possession of two individuals from London; one, a mercantile gentleman, the other connected with the office of a late solicitor in Broad-street. Any attempt to work mines without capital, on mere adventure, and particularly foreign mines, leaving the unfortunate miners who trust to English probity without that substance they have a right to expect for their labour, is highly culpable, and tends to bring the whole mining system into discredit.

ASHBURNTON UNITED MINES.—Persons interested in the success of mining in this district will be pleased to hear that a 56-in. cylinder engine has been started at the United Mines, under auspices of such a character as are rarely to be met with. The mines in question are well known to be the Wheal Vor of Devon, having made such returns in the olden time as to maintain, with a few other small concerns, an entire smelting establishment, and that at a depth scarcely exceeding the advantages afforded by ordinary adit levels. The depth of the mine is only 55 fms. below adit, and was attained by a very powerful engine of great difficulty and enormous cost. The present company have erected a steam-engine of sufficient power for developing the mine to an extent warranted by the certainty of success; and, judging from the expedition and energy shown during the past ten months, when the set came into their possession, it may be fairly presumed that the mine will be in full work by Christmas of this year; and that the quality work producing from the shallow levels will also enable them to prepare for market 20 tons of tin, besides a valuable parcel of copper ore, by the same period. The engine was started on Monday last, and moved off to the entire satisfaction of those present. It was erected under the superintendence of Mr. W. H. Gray, of St. Austell, and is intended only as the pioneer to many others yet to follow under the same direction, and to the infinite advantage of the inhabitants of a district teeming with mines, requiring development only to class them among the best in the West of England.

THE CRAVEN MOOR MINES ARE IMPROVING, AND THE COMPANY ARE MAKING RAPID PROGRESS: they are dressing from 20 to 30 tons of ore per month, and the present appearance of the mine promises that the company will be well rewarded for their great perseverance in carrying out such an undertaking.

THE STONEY GROVES COMPANY have cut into a vein of ore from 18 to 20 in., nearly solid. This is a private company. The set is bounded by the Merryfield to the west, and the ore has been found on the boundary between the Merryfield and Stoney Groves. About 13 tons have been smelted, which yield a good produce.

LEWIS MINES.—An important improvement is announced here, and a full report on the mine will be given next week.

WENDRON CONSOLS.—At the meeting of shareholders, held on Sept. 21, it was unanimously resolved.—That Mr. Peter Watson's office in London be an office of reference for this mine. Some very large and rich specimens of tin have been received at Mr. Peter Watson's offices this week from the different lodes, and he invites shareholders and others to view the same. The mine looks well, and increased dividends expected. Capt. John Taylor has been appointed manager.

NORTH TRESKERRY MINE progresses as rapidly as the works can be prosecuted. Several transactions in shares of the mine have taken place at a premium. We regret to learn that Capt. J. Raby, the manager, has been suffering severely from a cold, caught whilst exploring the old and new adits of the mine. Stones of good copper ore are being mined, and the mine is almost daily visited by enquiring mining celebrities and their agents. Nothing can be finer than the gossans and appearances in the levels already attained, or anything more promising for great results than the beautiful channels of ore found in these levels are situated.

AT WHEAL SIDNEY, the captain reports the prospects of the mine to be most encouraging. The new shaft is now down about 20 fms. The sampling is progressing favourably.

DEVON AND COURTENAY.—The lode in the end driving west, in the 100, is 4 ft. wide, and, on the whole, looking much better. They will not be long before they are sinking the 90, which will open up good work. The lode in the slope in back of the 80 will turn out full 3 tons of ore per fathom.

THE PORKELLIS UNITED MINES will be submitted for sale by auction, on Tuesday next, by Messrs. Galsden, Winterford, and Ellis. The mines are situated on a fine tract of land, and the whole of the machinery and equipment is complete, with two boilers and fittings complete, a steam winding and stamping engine, 80 steam shaft heads, and every requisite for working a large tin mine. The set is held for 21 years, from 1851.

TRESAVEAN MINE.—We understand that the number of applications for shares in this mine far exceeds what the projectors anticipated, several of the most influential of the Cornish mining capitalists having intimated their intention of joining the speculation. We find that the capital proposed to be raised is 25,000l., in 200, shares, 47. per share to be paid up at the time of subscription. There is little doubt but that at the first meeting every share will be allotted. Works have already been commenced, and ore is being raised. The captain confidently affirms that he shall not require more than half the capital named; but those who are acquainted with mining must know that it is better to have capital at once than to have recourse to votes for a second grant to work the mine "viâ prospectus." For prospectus, comparatively speaking, have been issued. Capt. Wm. Martin being so well known as one of the most skillful miners in Europe, renders his bringing out so celebrated a mine a work of little difficulty. It is proposed, we understand, to call a meeting of intending adventurers by advertisement in the Cornish papers and the *Mining Journal*, to be held on the mine, at which all preliminaries will be settled, and the mine set to work forthwith.

AT LADY BERTHA, a further improvement has taken place, the lode in Carter's winze being worth full 50l. per fm. In the 30 west they have about 2 fathoms more to drive before cutting the lode.

NANGLES MINE.—This mine has been worked some time for sulphuric muds ore. The workings are now suspended; it is said the prices are not sufficient to induce further prosecution. This is to be regretted, as in prosecuting these works considerable chances of discovery are afforded. Munro ores which contain from 2 to 3 per cent. for copper seem to be preferred by the purchasers, and for these qualities there is a ready sale. Considerable quantities of blende are procured in this locality, and a market is found for it at a fair price.

ST. DAY UNITED MINES.—A splendid lode of tin has been cut here, at Poldice, in the 150 fm. level. This is a great discovery for these mines, and will tend much to increase their value. On the whole, the tin interest at present is doing better than the copper, and tin mines command a higher figure than others. The price for tin seems to be steady, and the demand good.

HENWOOD'S NEW JIGGING MACHINE.—Capt. W. Martin, of Tresavean Mine, Capt. Pascoe, late of Great Wheal Busy, Capt. A. Bennett, of Carn Breva, and other eminent practical miners, have this week examined the model of this machine. They all pronounce it to be the most effective, practicable, simple, and cheapest yet introduced. They concur in opinion that it imitates hand labour as perfectly as may be desired, or is possible, whilst it diminishes the cost by three-fourths at least, and that it fully answers the purposes for which it is intended; that any sizes of ore may be treated, from the finest copper bottoms to coarse ragging. Mr. Henwood proposes submitting it to the inspection and opinions of the agents of some of the large Cornish mines this week, after which it is likely one will be erected of the full size, to test its practical value and efficiency.

ST. DAY UNITED MINES.—We noticed these mines in our *Journal* last week, stating that a large outlay had been expended upon Poldice, and that the adventurers were about reaping the reward of their perseverance; since then, we are happy to state, the agent reports that they have cleared up Billing's bottoms in the 134, and the lode is worth from 40 to 50l. per fm., and he has every reason to believe it is from 60 to 70 fathoms long and 4 in. level drive. In a fortnight they will commence driving the 144 under the other levels, and immense deposits of tin are anticipated.

NORTH DOLCOATH.—A sample of the lode recently discovered in this mine has been assayed by Messrs. Johnson and Matthey, and found to contain 1064 ozs. of pure silver to the ton of ore. This sample was a fair average of that part of the lode from which it was taken.

TRESAVEAN MINE.—Active measures are being taken here to get the mine to work: sawyers, carpenters, smiths, &c., are busily employed. A new winch is being fixed at Bray's shaft for hauling tributaries' work, a large party having been set on. Several tribute pitches have been set in other parts, and the mine promises soon to resume at least a portion of the inducements characterizing its former days. A number of miners have been at the mine seeking employment. As soon as the sales have been completed, and the materials removed, the new company will begin to operate more extensively.

BRYNTAIL MINE.—In this mine a great improvement has recently taken place. The lode in the 10 fathom level is yielding 3 tons of ore per fathom.

The Cornubia new iron steam-boat, which plies between Hayle and Bristol, encountered a tremendous gale in the Bristol Channel on the night of the 6th inst. The *Cornubia* is the fastest and most splendid boat on this line. She reached her destination in safety, after a fearful passage, many times being in imminent danger of being wrecked. Mr. John Brown, of Haverwater, the well-known and much-respected mineral agent, had a narrow escape indeed. Being unable to remain in the cabin, he got into the engineer's room, where he lay in the bunk, placing his overcoat, containing a large sum of money, under his head as a pillow. He was disturbed by a tremendous sea breaking up the floor of his apartment, when leaping out of bed in the dark he fortunately stepped on the only bit of wood that was left, or he would have gone through to the paddle-wheel; as it was, he had no time to think of coat or money, he dare he again enter the place to seek for them. The vessel was driven on by all on board everyone expecting the vessel to go down. Mr. Brown was compelled to remain in the water for four hours, when he requested aid, as a hopeless case, to ascertain if his coat was still in the place he left it. The steward found it, washed out of the bunk, and partly through the hole it had hit, however, fortunately for Mr. Brown, got entangled, and he thus recovered his treasure, though not without considerable suspense and alarm.

ROSEWARNE UNITED.—A typographical error occurred in the extract we gave last week from Mr. Murchison's *Review*. It was stated that the second cross-cut in the 58 was "100 fms." from the first one; it should have been "10 fms." We understand the mine is considered to be better than it has done for two years past.

REITH CONSOLS.—The sale of materials will take place on Monday, Oct. 18, at eleven o'clock, and not Tuesday, Oct. 19, as advertised last week.

ROYAL SANTIAGO MINING COMPANY.—In the event of this company being wound-up, it is fully expected that property will be bought by the Coburn Company, as from their position they would, no doubt, give a better price than other parties. Notwithstanding all the misfortunes of the Santiago Company, the original shareholders, of whom there are several, have been amply remunerated for their outlay.

CLARENDON OF JAMAICA.—The whole of the machinery necessary for thoroughly testing the property has been sent out, arrived safely in the colony, and is expected to be in full working operation in the end of the year, when it will be sent to this country. The shares, although in price, are very firmly held, principally by parties interested in the welfare of Jamaica, and aware of the great importance of successful mining in any part of the world. The neighbourhood of the mines, which a few years ago was a barren waste, now presents cheerful villages, the coloured population willingly accepting employment.

MINING MARKET.—We have received the following communications:—

FROM MR. JAMES CROFTS:—If the *lecturers* of the *Journal* will take the trouble to refer to the letter of the writer of last week, there will be found a discussion on the probability, or otherwise, of the Bank of England reducing the rate of discount, the object of the reasoning employed being to dissuade the public mind as to the probabilities of such a step on the part of that institution; and now, they having allowed another ominous Thursday to pass over without reducing their rate, it is presumed that the question is a settled one, for this year at least, since the value of money out of doors and in the Bank approximating more closely every day, there no longer exists the necessity of any change on the part of the Bank. The subject to an extent possesses great interest, because influentially a higher rate for money will, in the present state of trade and commerce, become an evidence of the gradual amelioration of all branches of industry, and act favourably, therefore, on all markets. To prove this position, it is only necessary to note the great increase of business in all departments on the Stock Exchange, demonstrating that the worst period of the year has now passed away, and is supplanted by a cheerful tone, which cannot fail to progress satisfactorily until it again reaches absolute, and it is to be hoped soon, prosperity.

On the mining market, to which the writer, he it understood, devotes his almost exclusive attention, the influence of the preceding circumstances had been very sensibly felt, in an advance in particular upon every well-established dividend mine, such as (to cite those who stand at the head of the List) Providence, Mary Ann, Wheal Margaret, Trevelyan, Tincroft, West Basset, the Caradons, and some others, for which there is a continuous demand; whilst in progressive mines there has been notable improvements also, as in Lady Bertha, Wheal Croake, East Wheal Russell, St. Day United (occupying an enormous position in the Dividend List), Vale of Towry, and Rosewarne United; whilst, strange to say, Pendown, Wheal Harriet, North Basset, Grenville, and West Grenville, so lately special favourites, scarcely exhibit signs of life, and are yet all assumed to be not only cheap but safe shares. The constantly upward course of Bryntail does high credit to the predictions some time ago hazarded of its value by a large holder, the shares having advanced from absolutely nothing to 4½, or thereabouts, buyers, and are expected to go much higher.

The shares in North Mines have also undergone a reaction in price, owing probably to (and to that cause alone) of holders of shares at the par price (3½) realising handsome profits, a wise act at all times in mining shares; at the moment, however, the market appears nearly cleared of shares, and they leave off firm in price at a reduction of 20s. to 30s. from the highest point. The news from the mine continues of a highly satisfactory character, and if there exists lead ore working, or in sight, throughout the mine to the aggregate extent of 12½ tons per fathom, and 20 to 25 tons in course of sampling for sale this month, as is reported, the mine, in 1000 shares only, is the cheapest, probably, in the whole range of newly-opened speculative concerns. As a corollary to this subject, similar circumstances have taken place in Old Tolgus United, &c., the price of the shares has fallen without an adequate or any reason affecting the property itself, and the public will do well to avail themselves of the present moment, the price of these shares; for one strong reason, amongst others, that the lode in the 40, which it is confidently anticipated will yield a course of ore, may be cut in about six weeks from the present time, and, if rich, the shares would rise to a very high figure. The highest and lowest of these shares has been between 100l. and 8l. or 10l. per share, the majority of those in original hands having cost, however, the higher price. It cannot be too often repeated, because no more important item can exist in the statistics of any mine than a small number of shares, where Old Tolgus United is at present only in 600, and the Bank of England, near Exeter, where "returns of lead and blende are now being made more than sufficient to meet the monthly cost," rich specimens of which, it is stated, can be seen at the office of the mine. Undoubtedly great expectations are put forth, and apparently on safe grounds, of this property proving, sooner or later, highly remunerative, and at present the shares are low in value. Holmshill still "drags its slow length along," and some shareholders, worn out by the repetitions of calls, show an inclination to sell out, first paying all calls due, at a nominal price. Wheal Arthur is reported favourably upon; the eastern and proding rich stones of copper ore, and likely to improve. Of Wheal Edward, Scotland, it is stated that in progress of nothing very definite can be stated, except that having lost the artificial support which at one time converted them into greenhouse plants, they have subsided into what is apparently a perfectly safe price 20 invest in. They are all, in the significant sense of the word, "Mines," possessing the necessary adjuncts for working, and all out of debt. An erratum must be noticed in the price of Wheal Edward shares, quoted in the Table of last week as 27½, instead of 2½; and in Wheal Basset, 21 to 26—the price of the latter being about the same as a year ago—200 to 210, which is necessary to allude to the two concerns because to the general public it is not known that the mines the demand is still limited, being, in fact, confined to such as exhibit improvements in the lodes, and already enumerated. The quietness class are neglected. The resuscitation of Wheal Croker, near Tavistock, and its conversion into a mine in 6000 shares, with all its machinery complete, and productive lode, is noticed with a view of recommending a mine upon which 47. 5s. per share has been expended; whilst the price of the new share is only 20s. We understand that the shares, or the majority of them, are most respectably placed, and the management is in most efficient and experienced hands.

FROM MR. JOHN ROBERT PIKE:—The market for the negotiation of British Mine Shares is, as a rule, distinguished by an irregular and spasmodic action. In periods of great monetary pressure this peculiarity is not so much noticed, owing to the weakness and paucity of transactions recorded; whilst, on the other hand, in times when money is both abundant and obtainable, it becomes a prominent, and occasionally a rather capricious feature, to that position of the general public, having no previous acquaintance with this description of security, cannot comprehend the principle of sound trading, and in the absence of any public event of exciting and general application, the shares of any particular mine in which they are desirous of investing can advance in the course of a single day to double, and often quadruple, their previous value, and in a great many instances even refuse to be comforted, by the very obvious explanation that, whilst a falling off in the yield of ore in a lode or vein produces a corresponding fall in the value of the shares, on the other hand, a fresh discovery of ore, or a sudden increase in the richness or quantity of metal in a lode, must necessarily cause an advance in the market value of the shares they represent, such rise or fall being in exact proportion to the increase or decrease in the value of the property. These cannot be too forcibly or authoritatively pressed on the attention of the public, as we are convinced that mining agents, whatever may be their sins of omission or commission, are frequently most unjustly charged with raising and depressing the prices of shares to suit their own convenience, when such fluctuations are not only beyond their control, either individually or collectively, but are the necessary effects of the causes we have specified. Apart, however, from all questions of a general nature, the present condition of the mining market is decidedly exceptional, as regards its general rise or fall; but not so when its position is considered in relation to the phenomena presented by the other markets for the purchase and sale of recognised securities.

The recent commercial panic, the inevitable result of over-strained credit, which has passed over both hemispheres of our globe like a tornado, its track marked by desolation and misfortune, has been severely felt in the British Mining Market, sensitive and responsive as it always is to the fluctuations in the values of money and corn. When the former of the two concerns became too commodious to become too commodious, the various shares in this metropolis were completely paralysed, and the market value of shares to be offered for sale at whatever price could be realised, thus unduly depreciating the market value of many securities to an extent which could hardly be credited without investigation. It might have been expected, that when the immediate effects of such an untoward state of things had been ascertained, and the metallic currencies of the principal trading communities of Europe and America had subsided into their natural dimensions and amount, that a revival of trade would immediately have ensued, bringing in its train national prosperity and wealth, a result which would have been justified by precedent, and was undoubtedly anticipated. Such, however, has not been the case. So great has been the shock which public confidence has received, that with money at a price all but nominal, millions have been for many months steadily hoarded by the public, valueless, because unemployed; commerce droops, and from the humble cot to the lordly palace goes forth the cry of diminished means and general discontent.

That such an abnormal state of things could not be of long continuance was palpable to every one acquainted with our national necessities and resources. Already an improvement in the tone of public confidence is visible in the steadily increasing supply of money sent into the mining market for investment, which, acting in a judiciously directed manner, results in a corresponding upward tendency; this is sufficiently apparent even now to cause public surprise without explanation, but will be easily understood, when we state that we could point to several mines raising sufficient ore to pay their working cost, and progressing to a dividend condition, the shares in which are market values considerably below the value of the machinery and general plant on the property. Such shares as these must rise, and that rapidly, to their real worth, in proportion to the general advance of the market. Already have a few mines advanced thus in value, and as our principal object is to contribute to a return to the confidence of the public, we are anxious that the present exceptional state of the mining market should be well understood, so that any rapid advance in share values may be rightly appreciated and rewarded.

FROM MR. RICHARD TREDDINICK:—The mining share market has shown considerable activity during the week, and transactions have been large and numerous, both in dividend and sound progressive shares. Basset shares are in request at 26 to 29s. Bryntail, 3½ to 3¾, closing purchasers at 4 to 4½; the prospects are much improved of late, and it is probable that a further advance in price will follow. Before demand, at 5 to 5½, with an absence of sellers: West Grenville is a promising adventure; the adit end west, on Field's lode, yields 1 ton of rich copper ore per fm. South Cornubia, sellers, at 3s. Grenville is looking kindly at the shaft at Newton Moor. Basset United has been largely dealt in; the lode at the shaft holds out fair chances of success at no very distant date; it is 4 ft. wide, and mineralised throughout. (Great South Tolgus, South Tolgus, and Old Tolgus United, all showing a purchase at 100 to 110; the ore is rich in quality, and the costs of production are much favourably against yields. At Old Tolgus United, the 32 west, on the engine lode, yields 5 tons of copper and blende per fathom. In the rise above, 5 tons. On the engine lode west, 1 ton of copper. In the 32 west, on south lode, 1 ton of copper. In the 41 east, 1 ton of copper. In the slopes above, 3 tons of copper; whilst the lode will be cut shortly in the 41, just under the shoot of ore, yielding 5 tons of copper ore per fathom. Good show of action in the 32 fm. level. Margery shares are in request at 26 to 28, to be expensive to work, and, notwithstanding a large area of open well, the dividends increase in proportion, whilst rumours assert a large and successful party in the engine will soon be required. Providence continues to open out well, and dividends of 4l. quarterly will be resumed now that the extra expenses of additional machinery are defrayed. Margaret shares have been in great request, and close at improved prices. Great Wheal Vor shares are flat, and in the absence of buyers the market wears a downward tendency. This mine, formerly so very productive, and now reopened at a very heavy expenditure, must be worthy the attention of capitalists at the heavy discount it now stands at. Great Wheal Busy, 3½, should be purchased; the prospects of success are good, and notwithstanding the disappointment evidenced at not finding an old adit, done mine rich upon the water being pumped out, mining authorities are not without confidence, that development in depth, and cross-cutting to side lodes, will lead to very important results. It was absurd to expect profits at first: perseverance in the present system of operations, and success will soon follow. *Nit desperandum* is the motto, as Bode should be the tailman of mining.—Friday, 8th Oct.—A telegram from Old Tolgus United, reports the 32 east and west on south lode, has improved. The settlement in shares this day has passed off satisfactorily, and without a single defaulter.

THE BRITISH POSTAL GUIDE.—A correspondence has taken place between the Post-office and Sir C. Roney, in consequence of the price of this useful little book being raised from sixpence to a shilling. The latter contends that there is no increase in the cost of its production to justify the selling price being doubled. The Post-office department admits, in answer, having disposed of the right of publication to private parties, and justifies the proceeding as advantageous to the public. This is an argument that can hardly be expected to meet general concurrence.

A petition has been presented at the Court of Bankruptcy for a winding-up order against the North Lincolnshire Shipbuilding Company, and will be heard on Oct. 23. David Laing Barn, merchant, of St. Michael's House, Cornhill, has been adjudicated a bankrupt. Seven divisors are allowed in which the adjudication may be disputed.

FOREIGN MINES

WADEBRIDGE.—The Camel Slate Quarry has recently so much improved that the slabs (some from 120 to 140 ft. in a stone) and roofing are of a very superior quality. It is, therefore, more than probable that the adventurers in this concern will be amply remunerated for their perseverance and heavy outlay. And considering the few slate quarries in this county, and the supply continually required, we naturally wish success, because not only is the neighbourhood in which the quarry is situated very materially benefited, but also the country generally, preventing as it does that monopoly which has for some years been attempted in the Cornish slate trade.—*Plymouth Jour.*

Mining Correspondence.

BRITISH MINES.

ABBEY CONSOLS.—J. Trevelin, Oct. 9: The lode in the engine-shaft is producing some saving work for lead. The lode in the 10, west of the engine-shaft, is yielding 3 cwt. of lead ore per fm. The stope in the back of the 10 east is worth 8 cwt. of lead per fm. The lode in the rise is worth 4 cwt. of lead per fm. The lode in the 10 east, east of engine-shaft, is getting in a more settled state. The stope in the back of the 10, west of engine-shaft, is worth 6 cwt. of lead per fm. The lode in the eastern shaft is much the same as last reported, worth 8 cwt. of lead per fm., and is of the same favourable character. The stope in the back of the 10, west of the eastern shaft, is much the same as when I wrote you last, worth from 10 to 12 cwt. of lead per fm.

ALFRED CONSOLS.—T. Trevelin, Oct. 13: Field's shaftmen are now engaged in dividing the shaft from the 160 to the 170, in order to put down skip road; no lode yet intersected in the 160 cross-cut, north of said shaft. The north lode in the 160, east of the fookan, is worth 67. per fm. Davey's engine-shaft is now sunk as deep as the 130, and we have set a cross-cut to drive north through the main lode. This lode in the 130, east of said shaft, is much the same as last reported. In the cross-cut south, at this level, we have not yet intersected the south branch, but expect to see it in about 5 fms. more driving. The main lode in the 10, east of the above shaft, is 18 in. wide, spotted with ore. The south branch at this level, west of No. 1 winze, is worth 20. per fm., and east of said winze, from 20. to 25. per fm. This branch in the 100, driving east, is worth 20. per fm. The new north lode in the 170, east of fookan, is 2 1/2 ft. wide, composed of muddle, spar, and blende, yielding good spots of ore. No other change to notice.

ANGARRACK CONSOLS.—J. Barratt, Oct. 12: Cox's engine-shaft is down 5 fms. 1 ft. 9 in. below the 12; the lode in the shaft is 6 in. wide, composed of quartz, muddle, and fookan, with occasional spots of yellow copper ore. The 12 cross-cut end, being driven north, is in 11 fms. 2 ft. 3 in. from Cox's shaft, and continues to yield much water. I think, from the appearance of the end, we are very near a lode.

BALLYMONEEN.—Wm. Barkis, Oct. 9: In the 25 cross-cut south our progress has been rather slow this week, in consequence of the hardness of the ground; driven since last report 2 ft. 6 in.—total, 3 fms. 4 ft. The 25 shaft is in mineral ground, with water coming from the bottom, and making good progress; driven since last report 4 ft. 6 in.—total, 4 fms. 2 ft. In the adit east the ground looks favourable for opening, and producing a little sulphur; driven since last report 5 ft.—total, 43 fms. 6 in. We have suspended operations at Johnson's Hill, in sinking the winze. We shall commence on Monday to clear up another old shaft.

BALLYVIRGIN.—D. Macdonald, R. Fellow, Oct. 7: The winze has been sunk 5 feet on the course of the lode, which is large, but poor; in the present bottom there is a branch of coppery muddle about 8 in. wide, the rest of the lode being composed of limestone, with spots of copper and lead throughout it; set at 21. fms. 1 ft. 10 in. at 8. per fm. In the north end we have come upon a change of ground, which has unheated the lode; since last report we have broken a considerable quantity of gossan, containing malleable copper, but near the present end it is composed of soft yellowish clay, which we think is a slide, and which we are of opinion has heaved the lode. By next week we shall be able to say more about it, meantime we beg to state that we are taking down a part of the lode left standing in the western side of the level; we cannot put any value upon the lode this week, but hope to do so next week; set at 21. fms. 1 ft. 10 in. at 8. per fm. will yield 2 tons of copper ore, 10 cwt. of lead, and 6 tons of muddle per fathom; set at 21. fms. 1 ft. 10 in. at 8. per fm. will yield 1 ton of lead and 8 tons of coppery muddle per fm.; set at 21. fms. 1 ft. 10 in. per cubic fathom. We have put 1 ton of lead, 1/2 ton of No. 1 crop, and 1 ton of No. 2 crop copper ore to pile since last report, and also spalled 5 tons of muddle.

BEDFORD CONSOLS.—J. Mitchell, Oct. 14: In the middle adit level we have cut into the lode 4 ft., and no north wall as yet; the lode is composed of soft spar, peach, muddle, capel, and a little copper ore; the end is letting out a great quantity of water, and looks well for an improvement.

BEDFORD UNITED.—Jas. Phillips, Oct. 12: The lode in the 130 east is 4 ft. wide, and is worth 3 tons of ore per fm. Paul's stope in the bottom of the 115 east is worth 2 1/2 tons, Huggins's 4 tons, and Jackson's 6 tons of ore per fathom; the lode in the winze in this level is still worth 4 1/2 tons per fm. We are driving by the side of the lode in the 115 west, and sinking by the side of the lode in the new shaft in the bottom of this level. Millman's stope in this level is worth 1 ton per fm. The lode in the 103 west is 4 ft. wide, and worth from 2 tons to 3 tons per fm. Warn's stope in the bottom of this level is worth 5 tons per fm. There has been no lode taken down in the 47 and 38 fms. levels east during the past week.

BODCOL.—F. Evans, Oct. 9: Evans's shaft has been sunk since last report 5 feet—making the total now sunk below the 10 fm. level 11 fms. 1 ft. We have some good branches of lead under the north wall of the lode, which looks promising.

BOILING WELL.—J. Delbridge, Oct. 9: The engine-shaft is set to sink by eight men, at 22. per fathom; the lode is 5 feet wide, containing stones of copper, lead, and blende. Austin's shaft set to sink by eight men, 7 fathoms, or to the 60, for 56. In the 60 west the lode is 2 feet wide, yielding a little lead, but not to value, worth 25. 15s. per fathom. In the 60 east the lode is 1 ft. wide, but poor; set at 27. 5s. per fathom. In the 20 east the lode is 2 1/2 ft. wide—tributary ground; set at 31. 5s. per fathom. In the 20, east of Syrett's, the lode is 1 1/2 ft. wide, yielding fine stones of lead, and looking very kindly; set at 17. 13s. per fathom. In the 10, west of Austin's, the lode is 2 1/2 feet wide—good tributary ground; set at 25. 2s. per fathom. In the 10, east of Austin's, the lode is 2 1/2 ft. wide—very good tributary ground; set at 25. 2s. per fathom. In the 30 cross-cut, towards the south lode, the ground is favourable; we expect 2 fathoms more will cut into the lode; set at 34. 5s. per fathom. In the 40 cross-cut, towards the south lode, the ground is favourable; set to drive at 21. 15s. per fathom. From present appearances we shall cut into the lode in the above levels in the present month. Our tribute pitches are much as last reported. Our machinery is working well. No other change to notice.

BRONFLOYD.—M. Barbary, Oct. 13: The south or caunter lode, now stripping down in James's rise, is of a most promising description, and yielding at present full 1/2 ton of ore per fathom. The north lode in the various stopes and drivages throughout the mine is without alteration. We shipped on Monday last the parcel of lead ore sold on Sept. 28, to Messrs. John Bibby, Sons, and Co.

BRYNTAIL.—J. Roach, Oct. 14: The lode in the 10 east still produces a ton of lead ore per fathom. The part of the lode previously driven by is still being cut down, which is also producing a ton of ore per fathom; these being the only operations on the course of the lode which speaks volumes in favour of the property. I expect the ventilation of the 25 cross-cut will be perfected this week, and the driving towards the lode in that level will be resumed next Monday.

BULLER AND BASSETT UNITED.—G. Reynolds, Oct. 9: We are making every effort to get the shaft down as soon as possible, the lode still presenting that promising appearance in depth as to warrant success almost certain.

BWICH CONSOLS.—R. Northey, Oct. 9: The lode in the 70 is in a disordered state; we are getting under that piece which has disordered the lode in the levels above; it appears to get longer, and the ore or productive part shorter, as we go down, as in the 60 the ore ground was 16 fms. long, and at the 70 it is only 11 fms. Therefore I would not recommend the sinking of Pwllrhynad shaft, until the 70 is more fully developed, as at this time the indications will not warrant it. All the rest of our operations are progressing satisfactorily.

CALSTOCK CONSOLS.—W. B. Collom, Oct. 14: In sinking the engine-shaft under the 34 a portion of the lode in the bottom of the shaft has been taken down, and is found to be from 2 to 3 ft. wide, composed of white iron, capel, fluor-spar, and ore, and is found to be the latter about 5 tons to the fathom; the lode continues to improve in sinking. In the 24 cross-cut to the north copper lode the ground continues favourable for driving. In the 24 east the men have been engaged in taking down the lode in the end, and find it to be a good ore lode for about 2 ft. wide. The lode in the stope in the back of the 21, west of winze, will yield about 5 tons of good ore to the fathom. There is no alteration to report in the 12 east, or in the winze sinking under the adit level.

CALSTOCK UNITED.—Capt. Wm. Cooke, Oct. 14: Our drive in the 28 end for the last four weeks by four men measured on Saturday last 7 fms. 4 ft., where we cut through the lode, and find it rather in a disordered state by the influence of the cross-course, but carrying small veins of tin not to value. The ground in the end is still favourable for driving, at 45. per fm., and would be lost at a lower price had not the mine been standing as now is. The wet weather appears to be set in, which enables us to stamp by day with 24 heads. We are getting about the tributaries' work as fast as possible.

CAMBORNE CONSOLS.—W. Roberts, Oct. 12: There is nothing new to report.

CARDIGAN CONSOLS.—J. Sanders, Oct. 11: During the past month the 20 west has been driven 2 fms. 1 ft. 3 in., where stones of ore are met with occasionally, but not sufficient to set a value on as yet. The 10 west has been driven 3 fms. in very unsettled ground; the part of the lode driven on for the last 5 fathoms has been unproductive, in consequence of which a cross-cut has been commenced to drive north, in which direction I am of opinion the productive part of the lode is to be met with; this cross-cut has been driven 5 fms. 3 in. The 10 east has been driven 2 fms. 6 in., where the character of the lode is much the same as for some time past, producing a little ore occasionally, but not sufficient to value. The No. 1 cross-cut, 15 fms. west of shaft, has been driven 1 fm. 4 ft. 6 in., making altogether 3 fms. 2 ft. from the side of the level, which is through the lode, and is suspended; the lode at this point is unproductive. The No. 2 cross-cut, 20 fms. west of shaft, has been driven 1 ft. 6 in., making altogether 3 fms. 3 ft. from the side of the level; in this cross-cut, about 9 feet from the side of the level, some strings of lead ore were met with, on which we have driven west 1 fm. 5 ft. 8 in., which has yielded about 1 ton of ore, but the end at present is unproductive; there are some good stones of ore still standing in the back of the level, where I intend to stop a few fathoms to ascertain its value. The No. 3 cross-cut, east of shaft in the 20, has been driven 3 fms. 1 ft. 3 in. from the side of the level; we calculate there is from 1 to 2 fms. more to drive to communicate with the winze sunk below the 10; this cross-cut has been unproductive as yet; a few fathoms have been stopped away in different places, but the ground being very hard, and the lode poor, some of the men have been removed to other places which appear to be of a more promising character to make discoveries. Saturday last being our pay and setting day, the following bargains were set:—The 20 to drive west, by four men, 2 fms. 2 ft. 6 in., or the month, at 81. 10s. per fathom. The 10 to drive east, by four men, 2 fms. 2 ft. 6 in., or the month, at 81. 10s. per fathom. No. 3 cross-cut, on the 20 east, by four men, 1 fm., or hole, at 81. A cross-cut to drive north from the 10 west, by four men, 1 fm., at 81. To stop in the back of the 10, in No. 2 cross-cut, by four men, 2 fms. 2 ft. 6 in., at 81. 10s. per fm. A pitch in the bottom of the 10, west of footway shaft, by six men, for two months, at 71. per ton for lead ore. A certain portion of the slimes, halvans, and burrows, to dress, for two months, at 71. per ton for lead ore. No other tribute pitches were set on Saturday, but probably some will be set again in the course of a few days.

CARMARTHEN UNITED.—R. Sanders, Oct. 12: In sinking Harrison's engine-shaft below the 12 the lode is still very loose. Since we passed through the elvan, although carrying the shaft from 8 to 9 ft. wide, we have neither wall of the lode. The lode is of a very promising character, and producing about 1/2 ton of lead per fm. In the 12, driving south, the lode is about 4 ft. wide, impregnated with lead throughout, producing about 5 cwt. of lead per fm. In the 12, driving south, during the past week we have passed through a very hard and unproductive piece of ground, but the lode at present is looking more promising, producing some good stones of lead, and I have no doubt but in a few days I shall be able to report more favourably of this end. Although having an abundant supply of surface water, we can scarcely keep our mine dry with our present small pitwork.

CASTELL.—F. Evans, Oct. 9: The 10 east has been driven since last report 1 fm. 5 ft., making the total driven east of the cross-cut 3 fms. 5 ft.; the prospects are encouraging. The lode produces lead, copper, and blende, and we are only carrying a portion of it.

CATHERINE AND JANE CONSOLS.—R. Harry: The lode in the deep adit end, driving north-west, continues much the same as last reported, 1 ft. wide, unproductive.

The stope north-west of No. 4 winze are worth 10 cwt. of ore per fm. The stope north-west of the rise are worth from 12 to 14 cwt. per fm. The stope south-east of No. 3 winze will yield 8 cwt. of ore per fm. The rise in the cross branch is worth full 12 cwt. of ore per fathom; as soon as this rise is holed to the stope in the bottom of the level, 5 fms. above the deep adit, we shall have a great many fathoms of ore ground laid open, which will, which will greatly assist our returns. The middle adit level is still opening well, the lode in the present end is about 18 in. wide, producing from 12 to 15 cwt. of good ore per fm., and showing signs of further improvement.

CEEN BRYNVO.—Oct. 8: The lode at the 80, driving east of the cross-cut, south from Taylor's shaft, is 8 ft. wide, composed of blende, spar, and clay-slate, interbedded throughout with spots of lead ore, with a promising appearance. The lode in the 68 end, driving east of Taylor's shaft, is 8 ft. wide, and will produce at present full 1 ton of lead ore per fm. This end, from all appearances, has now reached the run of ore ground seen gone down in the bottom of the level above, and from present prospects, we shall open at a good piece of ore ground in the back of the 68, east of Taylor's shaft. The lode in the 66 or deep adit level, east of Taylor's shaft, is 4 ft. wide, with a promising appearance, producing saving work. We have taken the men from the cross-cut north in the 20 for a short time, and have put them to drive the 44, east of Taylor's shaft, where I think we shall not have more than about 6 or 8 fms. to drive to reach the run of ore ground seen in the 56. We have only taken the men from the cross-cut until we have proved the ground a little in the 44, after which we shall put the men in the cross-cut again, as there is a good deal of water coming out of the present end, and we have not passed the line yet where the lode is likely to be, from what can be seen at the surface, but we have taken the men from this point to drive the 44, in order not to increase the cost.

The lode in the stope over the 68, 80 fms. west of Taylor's shaft, is 5 ft. wide, producing 15 cwt. of ore per fm. The stope over the same, 70 fms. west of shaft, is producing 12 cwt. of ore per fm. The stope over the same, 80 fms. west of shaft, is producing 10 cwt. of ore per fm., and 8 cwt. of blende. The stope over the same, 10 fms. east of shaft, is producing 8 cwt. of ore per fm., and 10 cwt. of blende. The lode in the stope over the 66, 40 fms. east of Taylor's shaft, is 12 ft. wide, yielding 18 cwt. of ore per fm. The stope over this level, 40 fms. west of shaft, is producing 10 cwt. of ore per fathom. The lode in the stope over same, 60 fms. west of shaft, is 6 ft. wide, yielding 12 cwt. of ore per fm. The stope over the same level, 50 fms. west of same, is yielding 10 cwt. of ore per fm. The lode in the 44 fm. level, going west of the lead, 80 fms. west of Taylor's shaft, is 2 ft. wide, yielding at present about 6 cwt. of lead ore per fm.; this end is being driven by two men, and we are likely to open out some ore ground on this level which may pay pretty well for taking away. The lode in the stope over this level, 70 fms. west of Taylor's shaft, is 3 ft. wide, and will produce at present 10 cwt. of ore per fm. The stope over the 32 fm. level, 30 fms. east of Taylor's shaft, is yielding about 8 cwt. of lead ore per fathom. We sampled 60 tons of ore yesterday; this sampling is 10 tons short of the complement, in consequence of the hindrance by the dry weather, as we were idle for nearly three weeks from breaking any ore in consequence of the water being in, and also hindered from drawing and dressing during that time; but we have now a good and full supply of stuff broken underground, and a plenty of water for drawing and dressing, &c., and I hope we shall be able to make up a little for the next two samplings for this year, and we shall have about 60 tons of blende for sale shortly, or perhaps a little more. Everything shall be done that possibly can be in order to get things forward as much as possible. The dressing, &c., with all other things, are going on regular.

CLARA.—S. Trevelin, Oct. 13: Our water-wheel is regularly at work, and the water in fork: men are putting in a tram-road, and expect to finish to-day. This will prove a saving upon that of wheeling of at least one-third. By Monday next the men will commence operations in the different bargains. The crusher is working remarkably well, and we have been dressing, and hope soon to get a parcel of ore for market.

COLLAcombe.—Samuel Mitchell, Oct. 12: During the last week the 84, west of the western shaft, has been driven 9 ft., and the lode is greatly improved, being composed of quartz, capel, and lead ore, and is worth 10 cwt. of ore per fm. The lode in the 30, driving west of the western shaft, has been driven 9 feet; the lode is of a highly promising character, composed of quartz, blende, prlan, and rich copper ore. Other operations progress well.

CROWDALE.—J. Richards, Oct. 14: In the shallow adit level cross-cut north the ground continues easy for progress. The lode in the pitch below the 30 is improved, worth full 4 tons of ore per fm.

CWM SEBON.—J. Boundy, Oct. 7: The spindle belonging to the drawing-machine broke on Wednesday last. We have taken it out and sent it to the foundry at Aberystwyth. We hope to get the new one by Tuesday or Wednesday next, when every effort will be made to get the machine to work again as soon as possible. The lode in the 70 east is much the same as last reported on. No lode has been taken down in the 70 west during the week, in consequence of the end being full of stuff, and not being able to draw it away. Those men are now engaged in the 20 east, opening on the course of the lode, where it is 1 ft. wide, and is looking promising, although at present not much lead to value. The lode in the 60 east maintains its size and character as reported last week. In the 30 cross-cut, driving east on the course of the lode, the lode is about 9 in. wide, and a little ore, but not enough at present to value. In the 20 cross-cut south the ground is getting a little harder for exploring. The stope and tribute pitches are without any important change.

DALE.—R. Nines, Oct. 14: The 43 cross-cut is now down 3 fms. towards the Pipe vein, but has not as yet cut it. A slight breakage in the engine has hindered us; this is now repaired. The ground in the 26, going towards the Lum, is without alteration. The stope eastward on Johnson's lode, in the back of the 20, are still poor, producing some good ore, also the end driving east in the back of the rise, but the end going westward is still poor.

DEVON ANTI CORNWALL UNITED.—N. Neill, Oct. 12: During the past week the lode at William and Mary's adit level has been improved, being now 3 ft. wide, and worth 2 tons of ore per fm. There is no change to notice in any other part.

DEVON AND CORTENAY.—T. Bawden, Oct. 12: Our lode at the 100, driving west, will turn out 1 ton of ore per fm. The lode in the 80 is worth 3 tons of ore per fm. The pitches are much the same as reported last week.

DEVON BURRA BURRA.—Capt. Lord, Oct. 14: The ground driving north and south in the 40 is favourable for progress; it is composed of a light kilas of the clay-slate formation, such as is always found to be congenial for mineral. We are making good progress in driving at White's shaft; to-day we met with a branch 4 in. wide, bearing east and west; this we shall drive on east a little to prove it.

EAST CARN BREA.—T. Glanville, Oct. 12: The engine-shaft is sunk 4 fms. 3 ft. below the 14; in the present bottom the lode is 20 in. wide, composed of gossan and copper ore, yielding 2 tons of the latter per fm. The 14 is extended 12 fms. 3 ft. east of the engine-shaft; in the present end the lode is 15 in. wide, yielding 2 tons of copper ore per fm. The 14 is extended 4 fms. 4 ft. west of the shaft; we have to-day taken down part of the lode, which is 1 ft. wide, composed of gossan and copper ore, yielding 1 1/2 ton of the latter per fm. We have now at surface about 30 tons of average quality copper ore.

EAST GUNNIS LAKE AND SOUTH BEDFORD CONSOLS.—J. Phillips, Oct. 12: The lode in the 75 west is greatly improved, being now 3 ft. wide, and worth from 2 to 3 tons of ore per fm. The stope in the back of the 62 west is worth 2 1/2 tons per fm. The stope in the back of the 49 west are worth 2 tons per fm. The lode in the 36 east, on north lode, is 4 ft. wide producing saving work. South lode: The lode in Coward's shaft is 3 feet wide, yielding good saving work. The lode in the 36 east is 2 feet wide, producing saving work. The lode in the 20 east is 2 ft. wide, worth 1 ton of ore per fm.

EAST ROSEWARNE.—J. Delbridge, J. James, Oct. 9: In the 43 north cross-cut the lode is still favourable. The 43 stope is more favourable than usual. In the 33 west the lode is large, but poor. In the 22 east, a good branch of ore, from 6 to 9 inches wide. In Hallett's rise the lode is from 6 to 8 in. wide—tributary ground. In Mathew's winze in the 22, on north lode, the lode is 10 in. wide—tributary ground. In the north lode are a little improved. In the 22 west, on the south lode, the lode is 6 in. wide, yielding stones of copper ore, and good stones of lead.

EAST TAMAR CONSOLS.—G. E. Tremayne, Oct. 13: There is no particular alteration in any part of the mine since last week's report. The lode in the engine-shaft and the 40 south continues much the same in value.

EAST TREFUSIS.—J. Pope, Oct. 13: At the engine-shaft, sinking below the 22, the lode is 2 feet wide, containing stones of copper ore. In the 22, west of engine-shaft, the lode is 3 ft. wide, composed of quartz, fluor-spar, and spots of copper ore. In the 22, east of engine-shaft, the lode is 2 1/2 ft. wide, containing stones of ore, with a very promising appearance. In the adit level, east of engine-shaft, the lode continues in two parts; the south part yielding stones of copper ore.

EAST WHEAL FALMOUTH.—W. Hancock, Oct. 12: The 20 west, on Chennell's lode, will produce 14 cwt. of lead and 7 cwt. of jack per fm.; the winze behind this end will produce 14 cwt. of lead per fm., which is sunk to water, and suspended for the present. I have put the men to stope the ground to the west of it, where the lode will produce 14 cwt. of lead per fm., the stope in the bottom of said level, east of this lode, the latter lode will produce 12 cwt. of lead per fm. The stope north and south of rise from the 30 to the 20, on the caunter lode, will produce 10 cwt. of lead per fm.; the stope in the back of the 30, on the latter lode, south of Tyack's lode, will produce 7 cwt. of lead and 5 cwt. of jack per fm. The 30 west, on Chennell's lode, is producing stones of jack, but not to value. We are daily expecting to see a change in this end for the better, as there is a good bunch of lead gone down in the bottoms below the 20, about 2 fms. to the west of the present end. The same level south, on the caunter lode, is producing good stones of lead and jack, saving work. The engine-shaft at the 10, west of the 30, ground just at last reported. No change to notice in any other part. I hope to have 30 tons of lead to pile by to-morrow evening.

EAST WHEAL RUSSELL.—W. E. Commis, Oct. 9: Some very encouraging-looking ore was broken this afternoon from the 88; this looks well, and will, I hope, lead to success. You shall be advised on Tuesday. Capt. Goldworthy is well. — W. E. Commis, Oct. 12: I have just come back from East Wheal Russell. Capt. Lean has been underground with Capt. Goldworthy to-day, and they concur in speaking most favourably of the 88, as indicating something very good ahead; the end is very wet, which carries away the fine black ore. It will be a good job done when the shaft is communicated, for the sake of ventilation.

EAST WHEAL TOLGUS.—Oct. 9: Redruth Consols Lode: The lode in the 46, east from the engine-shaft, is 8 in. wide, unproductive. In the rise in the back of the 34, rising towards John's shaft, the lode is 2 1/2 ft. wide, producing good stones of copper ore, and saving work for tin—a very promising lode. The lode in the 22, east of John's shaft, is 3 ft. wide, producing stones of ore, and saving work for tin. The stope in the bottom of the 22, west of Stephen's winze, is yielding 2 1/2 tons of ore per fm., and saving work for tin. At John's shaft, sinking below the 22, the lode is 3 1/2 ft. wide, yielding 5 tons of ore per fm. for the length of shaft (1 ft.), and saving work for tin; this shaft is locked. In the 12, east of John's shaft, the lode is 2 ft. wide, producing stones of copper and tin. The stope in the bottom of the 12, west of John's shaft, is yielding 2 tons of ore per fm., and the stope in the back of the 12, east of John's shaft, is yielding 5 tons of ore per fm. The ground in the 12 cross-cut south is just as when last reported—rather hard.—North Lode: In the adit level, east of the engine-shaft, the lode is 8 in. wide, consisting of soft spar and gossan, with spots of black copper ore.

EXMOUTH.—W. Skewis, J. Nicholls, J. Rodda, Oct. 14: The lode in the 60 north is not quite so good as last reported, now being worth 1/2 ton of lead ore per fm. The south end at this level we have suspended for the present, and put the men to cross-cut west in order to prove the lode in that direction. We have three pitches working in the back of the 60 north, tribute, varying from 21. 10s. to 4s. per ton; the lode in one of these pitches is very much improved, and will now yield 1 1/2 ton of lead ore per fm. The cross-cut west from the 40 north has intersected another lode, which is yielding some good stones of lead ore. The winze sinking in the bottom of this level is the same as last reported. The lode in the 40 south is improved, and is now producing 1/2 ton of lead ore per fm. The cross-cut east from rise, in back of 20 south, is communicated with the 10 south, which has thoroughly ventilated these levels, and will now enable us to drive south with all speed. The adit shaft is yielding 1/2 ton of lead ore per fm. All the other bargains are without any change.

FRANK MILLS.—J. P. Nicholls, J. Cornish, Oct. 12: The following is the result of our general setting, which took place on Saturday last:—The 45 to drive north by four men, from the east lode, at 5 fms. 2 ft. 6 in. stant, at 21. per fm.; this end is unproductive of lead; value, however, this stant will bring us over Cole's pitch, in which we have a very good

lode. The 45 to drive south on same lode, by two men, 3 fms. stant, at 21. 15s. per fm., the lode in this end is at present disordered by a slide. The 60 to drive south on east lode, by two men, the month, at 21. per fm.; the lode producing occasional stones of lead and blende. The 72 to drive south on east lode, by four men, the month, at 21. per fm.; the lode is 3 ft. wide, producing saving work. The winze to sink in the bottom of this level, from 50 to 60 fms., by four men, 5 fms., or hole, at 31. 5s. per fm.; the lode is from 4 to 5 ft. wide, yielding from 6 to 7 cwt. of ore per fm. The winze to sink in the bottom of the 72 north, on the east lode, by two men, 1 fm. stant, at 51. 10s. per fm.; the lode, and ground in this winze is at present harder than usual seen in the mine, lode consequently unproductive of lead to value. A rise in the back of the 72 north, on the west lode, by two men, the month, at 21. 5s. per fathom; the lode is yielding 1/2 ton of lead ore per fm. The 84 north, on the east lode, to drive by four men, 2 fms. stant, at 81. per fm. The same remark will apply to the lode and ground in this end as that in the winze in the bottom of the 72 north. We purpose to drive this end by the side of the lode in order to get cheaper ground, and consequently make greater progress in driving. A rise in the back of this level, by two men, at 31. 5s. per fm. The 84 south, on the east lode, is suspended, and the men put to rise against the winze coming down from the 72 south, set to six men, 5 fms., or hole, at 31. per fm. The tribute settings are as follows:—A new pitch in the back of the 60 south, on east lode, by two men, for two months, cut down and taken at 20s. per ton. Geek's late pitch in the back of the 60 south, by four men, for two months, cut down and taken at 11s. 11s. per ton. We expect these pitches will turn out better than any we have hitherto worked. A new pitch in back of the 72 north, by two men, 2 months, at 21. 10s. per month, at 21. 10s. per ton. A new pitch in back of the 72 south, by two men, for 2 months, at 21. 15s. per ton. W. Nicholls's late pitch in back of ditto, by two men, for 2 months, at 51. per ton. Lamphire's late pitch in the back of ditto, by two men, for 2 months, at 41. per ton. In addition to the above we have pitches working at the following tributes:—One in the back of the 84 north, by two men, at 51. per ton; one in back of the 72 north, by two men, at 41. 15s. per ton; one in back of the 60 north, by four men, at 21. 2s. per ton; one in back of the 60 south, by two men, at 41. 15s. per ton; and one ditto, by two men, at 51. per ton. We beg to remark that, although we have not at all times been able to report favourably of the levels when driving, the ground between them has yielded even beyond expectation, which is confirmed by our returns. We sampled yesterday 100 tons of lead ore, and should have sampled several tons more had the price of lead been better, as we have not now dressed.

GAWTON COPPER.—J. Gill, Oct. 13: The 50 and east is progressing satisfactorily; the ground is favourable for driving, the present price being 51. per fathom; the lode is about 2 feet wide, composed of muddle, prlan, and fookan, with a little copper ore, but not to value; there is more water oozing from the end than usual, which I expect will be the case as we approach the cross-course. There is no alteration in any other part of the mine to notice since last week.

GERNICK.—Jas. Barratt, Oct. 13: During the past week we have cut through the lode mentioned in my last, and found it to be the south part of the lode, spoken of a fortnight since. The branch under the head wall is 10 in. wide, and at the footwall is 20 in. wide, including the horse. The part on the footwall is composed generally of a dark elvan, containing black oxide of copper, yellow oxide of iron, and muddle, it is a very promising appearance, and, in my opinion, will be found very productive of mineral; its bearing is north-east, and dips north-west about 45° ft. in a fathom.

GOGINAN.—Oct. 6: No change of importance has occurred in any part of this mine since my last report. The lode in the winze sinking below the 60, or deep adit level, 40 fms. west of Bryn Pica shaft, is 4 ft. wide, yielding full 1 ton of lead ore per fm. The lode in the winze sinking below the same level, 70 fms. west of shaft, is 3 ft. wide, and will produce from 1 ton 5 cwt. to 1 ton 10 cwt. of ore per fm.; this winze will be deep enough to start a 10 fm. level east and west of the winze in a few days. There is no alteration in either of the cross-cuts since my last report, but the ground is a little more favourable for driving. These cross-cuts are being pushed on with all possible speed. The tribute pitches over the 60 are as usual, yielding on an average about 9 cwt. of ore per fm. The lode in the 30, driving west of the cross-cut, north from the boundary shaft, on the north lode, is 4 ft. wide, yielding good stones of ore, at times saving work. This level is being driven by two men and two boys. The tribute pitches at the different levels in the old part of mine are yielding a pretty deal of ore, and on the whole looking pretty well. The pitch in the bottom of the deep adit level at Levennewydd, 50 fms. west of the cross-cut, is yielding about 14 cwt. of ore per fm.; let to six men, at 91. per ton, including all cost; the dressing, &c., with all other things here, are going on as regular. We are stamping and dressing all the old halvans that will pay for handling over and leave a little profit; all these things are being well attended to, and everything done to get out as much ore from it as possible.

GREAT DOWGAS UNITED.—J. Dale, S. M. Rogers, Oct. 12: The engine-shaft is sunk 35 fms. below the deep adit, or 83 fms. from surface, divided and cased, footway put in, plat cut, and the whim-kibble brought to draw the stuff therefrom, and is working well. The shaftmen have been engaged since the last week in August driving south towards the south lode, the great Goffan lode being the main object, which, according to its underlay, is about 20 fms. from the shaft, and towards which we have driven 17 ft. The ground in the present end is of a light blue clay-slate stratum, of regular cleavage, and congenial for mineral, and can be driven by six men from 3 to 4 fms. per month. Charles's shaft has been cleared and sunk by four men, 8 fms. 3 ft. 1 in., and a cross-cut driven west of it, 2 fms. 2 ft., and has the shaft the lode, which is split in 14 and is now suspended. We have cleared west from the said shaft, on the bottom of the old men's workings, 5 fms., but the lode is poor, and is also suspended. We have put two men to stope in the deep winze 10 fms. below the deep adit; 7 fms. wide, composed of spar, muddle, copper, peach, and tin, but not enough of either to value, though altogether it is a very kindly lode, but is suspended at present. We think there is a better chance to find it richer for mineral in our bottom level, which is now being driven south from engine-shaft, that being 28 fms. deeper. We are stopping, by four men, at the western side of the great muddle bottom lode, which is split in 14 and is now suspended. We have cleared west from the said shaft, on the bottom of the old men's workings, 5 fms., but the lode is poor, and is also suspended. We have put two men to stope in the deep winze 10

in the back of the 28 is much improved since my last report. I sampled 62 tons 12 cwts. of blends yesterday—a good parcel. The boiler is in its place, and the masons are build-

ing the dross. The engineer is getting on as fast as possible with the work. The last for bringing in the water is pushing forward very well.

WHEEL ARTHUR.—T. Carpenter, Oct. 11: The adit level is driven west of cross-course, on the south side, 7 fathoms over ground, with an average 121, per fathom, and the lode continues equally as good in the present end. The eastern end, in the same level, is driven 4½ fathoms east of cross-course, where the lode is now yielding splendid stones of copper ore. I have every reason to believe the lode in this end will be equally as good in a fathom or two more driving as it is in the western end.—Eastern Mine: We have not taken down any lode in the 20 east this last week past, but shall cut through the lode in a few days, and then I will immediately inform you of its size and value.—North Lode: The lode in the winze sinking below the bottom of the adit west is 5 feet wide, yielding good stones of copper ore. There is no particular change in any other part of the mine since last report.

WHEEL EDWARD.—M. H. East, Oct. 9: North Lode: Since my last communication the shaftmen have been engaged squaring down the shaft and stripping down the lode, from which we have broken some rich quality ore. It is a good change, but the shaft must go deeper to prove the result. At present I am inclined to think that the ore is coming in from the western ground; if it prove so, it will be a good thing for the mine. There has been some of the ore part of the lode taken down in the winze this week, but at places where we have cut into it occasionally it is looking very well. The ground in the 52 west is looking better, driving by the side of the lode.—South Lode: We have just commenced sinking the engine-shaft below the 71, per the lode. The lode in the 71 west is worth 1½ ton of ore per fathom. In the same level east the lode is worth 1 ton of ore per fathom. The lode in the slope in the back of the 71 east is worth 2½ tons per fathom. The lode in the 71 east is yielding saving work. All other points are much the same as last reported.

WHEEL EMMA.—W. Goldsworthy, Oct. 11: The engine-shaft is now down about 9 fms. below the 46, and the ground of much the same character as stated in previous reports. The 46 east is still opening out tribute ground. In the 46 west we have cut in north, and met with an increase of water, which I have been long expecting; the lode, so far as seen, is about 2½ ft. wide, and I am glad to state produces good stones of ore; when cut through we shall drive on its course, as I consider the lode will be easier than the country for driving in. The lode in this level has considerably improved, and has now a very promising appearance. The new pitch in the back of the 46 east is looking exceedingly well, and three men, at 3s. in 17, will have no difficulty in raising 80 tons of rich ore should its present yield continue. Other parts of the mine are without change. We weighed off, on Saturday last, 52 tons of fair quality ore, and hope to obtain a considerable increase by next sampling.

WHEEL HARRIETT.—S. Williams, Oct. 9: We have reached the north wall of the lode in the 100 fm. level cross-cut, and in a few days I shall be able to write you its appearances. The lode in the 90, east end, is without change to notice. The lode in the winze sinking below the 74 is from 3 to 4 feet wide, producing 12 tons of ore per fathom for length of winze (12 feet). The lode in the slopes below the 74 is producing 2½ tons of ore per fathom. The lode in the 74 east end, is producing stones of ore, but not sufficient to value. The lode in the 74 east end is divided with a horse of granite, producing stones of ore.

WHEEL MARY EMMA.—W. Doble, Oct. 13: Lane's engine-shaft is making good below the adit level: we shall soon be throwing open the lode in going down, as the shaft will be sunk on the course of the lode. The men are getting on with making the new drain to take off the water from the adit, the old one being choked, and with the heavy rains it will not carry the influx of water.

WHEEL TEHIDY.—J. Pope, Oct. 8: The following is our setting this day:—In the 60 cross-cut south nothing cut since last report; ground rather hard; set 1 fm., at 121, to six men. In the 60 east, on counter lode, the lode is 8 in. wide, spotted with ore—a kindly lode; set to six men, at 6d. per fathom, 3 fathoms. In the 50, east of boundary, the lode is 16 in. wide, composed of spar, peach, and spotted with ore—nothing to value; set to four men, at 6d. per fathom, 3 fathoms. No setting in the tribute department this month, as it is usually set for two months.

WHEEL TRERARVAH.—R. Gundry, F. Hosking, Oct. 12: The 70, east of flat-rod shaft, is as last reported, worth 12½ tons per fathom. The 70, west of flat-rod shaft, is not looking so well, but still yielding ore about 1 ton per fathom. We have set a pitch on tribute in the back of this level at 3s. in 14. In Jenkin's winze, sinking below the 60, east of flat-rod shaft, the lode is a disorderly a little by a horse of killas, but still producing ore. The 40, west of flat-rod shaft, same as last reported. There is no alteration in any other part of the mine.

WHEEL TRELAWNY.—W. Bryant, W. Jenkin, T. Grenfell, Oct. 14: The cross-cut in the 152, at Smith's shaft, is extended 4 ft. towards the lode. The lode in the 142, north of the shaft, is 3 ft. wide, worth 20½ tons per fathom; the lode in the south end in this level is unproductive, being still under the influence of the slide. The lode in the 132 north is 2 ft. wide, worth 5½ tons per fathom. We have commenced to sink a winze in the bottom of this level, south of Smith's shaft, it is 2 ft. wide, worth 6½ tons per fathom; in the same level north it is 2 ft. wide, worth 6½ tons per fathom. In the 120 north it is 3 ft. wide and worth 7½ tons per fathom. In the winze sinking in the bottom of this level it is 2 ft. wide worth 7½ tons per fathom. Smith's Mine: Trelawny's shaft is sunk 9 fms. under the 142. The lode in the 142, south of the shaft, is 2 ft. wide, worth 8½ tons per fathom; in the same level south we are driving by the side of the lode. In the 130 south the lode is 3 ft. wide, worth 10½ tons per fathom. In the 107 north it is 2 ft. wide, worth 5½ tons per fathom. The slopes and pitches are producing much as usual.

The QUARTERLY RETURNS OF BLACK TIN AND LEAD ORE are deferred until next week. We shall be glad of information, that they may appear correctly.

SMEETING AND REFINING TIN AND TIN ORES.—Mr. J. P. Budd, Yataly-fers Iron-works, Swansea, has patented some improvements in the smelting or refining of tin, tin ores, and tin scrap, which consist in smelting and refining them in close vessels, from which the atmospheric air is excluded, and into which carbon is introduced in the necessary quantities, and the vessels are heated externally by fires. The pure tin first separates from the matters with which it may be mixed, and afterwards a higher temperature may be applied, sufficient to smelt the earthy matters and more refractory metals mixed with the tin, tin ores, and tin scrap. This invention is also applicable to separate the tin from tin plates and tin plate sheavings which may be unserviceable. The furnaces to be employed nearly resemble those used for the reduction of blende or black jack ore into metallic zinc or spelter. The pots or crucibles may be of clay or of cast-iron, according to the intensity of heat required to be given, and may be in shape either of the English or Silesian form. Instead of mixing carbonaceous matters with the tin, tin ores, and tin scrap in the closed vessel, the oxides may be first reduced by a preparatory process in a suitable calciner, and if it be desired to fuse the earthy admixture in the tin ores, fluxes suitable for the purpose may be introduced with such ores into the pots, which in that case should be made of the best Stourbridge clay.

PERMANENT WAY.—Mr. Clark, Atlas Works, has patented, for Mr. Beers, engineer, New York, a novel construction of railway. He uses a cast or other iron foundation rail formed of a series of arches supported on stones. These break joint with rails, and a continuous track is thus formed, the rail being bolted to the foundation rail, and the gauge maintained in the usual way. A strip of gutta-percha, or other elastic material, is inserted to prevent metal and metal coming together.

COPPER TUBES.—Mr. S. Walker, Birmingham, proposes to take a skelp, and having turned up one end, place therein a mandril. He passes the turned up skelp, together with the end of the mandril, through an ordinary lapping hole. This lapping hole is fixed in front of a pair of rolls, having grooves of the size of the tube to be made. The rolls give the skelp a tubular form, and the tube is afterwards soldered with a solder composed of equal parts of copper and zinc, with a little lead and bismuth.

HYDRAULIC MACHINES.—Mr. A. Pelez, Mortimer-street, has patented a machine for raising and drawing water, which can be adapted to a well 72 feet deep. It may be put in motion by a one or two horse power steam-engine, and will raise at least 88 gallons of water per minute. In lieu of a steam-engine, horses or manual power may be used to put the machine in motion, by means of a handle working a fly-wheel.

STEAM-BOILER TUBES.—Mr. E. Burke, of Upper Thames-street, lines these tubes at the end which come to the fire-box with a few inches of brass tubing, by which welded iron tubes are rendered more suitable for the flues of such boilers.

EAST INDIA COAL COMPANY.—Gopcanthpore: During the past fortnight 6342 maunds of coal have been raised. We have had ten working days only—two Sundays and two native poohah intervening. The No. 2 shaft, sunk by Mr. Wilson, has attained the depth of 100 fms., without any signs of coming upon coal. I have thought it advisable to stop the sinking and have down to ascertain the depth at which coal can be got. The gin-house, gin, and pit-head trucks of the No. 3 shaft are completed, and we are raising coal from it. A good road, 16 ft. wide, has been made from this colliery to the Government trunk road. Other roads to connect it with the Konoostoria and Basarah property are in course of construction.—Topost: The engine has been at work daily since my last report, and a great quantity of water is being pumped out. The gallery going west towards the old mine has been driven 16 ft. since last report; in about a fortnight the communication with the old mine will be completed. A large godown, or storeroom, is in course of construction at this place. 1090 maunds of coal have been raised here.—Konoostoria: Since my last I have sunk to the coal at this place, and four galleries have been driven, each 5 ft. long. By next report I shall have the pleasure of announcing the dispatch of coal from this colliery to the wharf. We have about 25 families of coal cutters at this place.—Basarah: The shaft here is now down to the depth of 52 ft.—9 ft. since last report; the sinking is going on day and night through hard sandstone. By next report I shall be able to say that we have come upon coal. The coal here is of very good quality, and found at a depth of 64 ft. from surface. Huts for coillies and workshops are gradually being erected.—Kosta: The low dense jungle has been much cleared. I have taken out the water from the old quarry here, and have commenced removing the earth on top of the coal; in a few days the quarrying will commence. A bungalow is being completed here, as also huts for coal cutters and other workpeople.—Rusrah: No work in progress here.—Taunksooley: No work in progress here.—Dhusul: The pump has been nearly completed at this place. The delay has been owing to the want of two or three little things connected with it, which are being made in Calcutta.—General Remarks: 14,500 maunds of coal have been raised in August; this quantity, though small, is yet about 4900 maunds more than have been raised, on an average, during the past twelve months. I trust I shall be able to increase this quantity by about 10,000 maunds next month. The weather has been lately very favourable, and I find no difficulty in getting good coal cutters and other workpeople.—J. FORTESCUE HARRISON, Agent and Superintendent; CHAS. S. STAIN, Deputy-Superintendent.

From Leeds, our correspondents (Messrs. Gledhill and Co) state that the mining market is improving. Craven Moor Mine is looking well, but the shares have been depressed, in consequence of a large holder having thrown his shares upon the market, and though it has lowered the price it has not lessened the legitimate value of the mine. Much excitement has been caused in this neighbourhood by the stoppage of a great number of the collieries in the Leeds district, which has thrown about 3000 men and boys out of employ. A large meeting of the men was held on Woodhouse Moor on Monday, and another yesterday, near Rothwell Haigh: there were from 2000 to 3000 persons present. There seems to be a determination on the part of the men to resist the reduction of 15 per cent. proposed by the masters. The men have offered to settle their differences by arbitration. We hope a speedy and amicable arrangement will be come to between the parties.

Our Sheffield correspondents (Messrs. Smith) report rather more enquiry after some of the Derbyshire mines. Peak Forests have changed hands several times at 2½s. 6d., 2½s. 6d., and 2½s. 6d., and are steady; North Derbyshire have been done at 1½s. per share; Mill Dams have buyers at 6s. 3d. 6d.; and Mill Towns at 2½s. 6d. Ryams continue flat, and are freely offered at 40.

NOTICE.—Mr. EDWARD ROBERT HEARN being no longer connected with the MINING JOURNAL, it is requested that all communications intended for publication may be forwarded direct to the Editor.

With this week's MINING JOURNAL we give a SUPPLEMENTAL SHEET which contains—Royal Cornwall Geological Society—Papers read:—On the Iron Mines of Perran—Notice of Copper Mining in Chili—On the Constitution and Structure of Slate—On the Chalk Flints and Green-sand Fragments Found on the Castle Down of Treco, one of the Islands of Scilly—On the Strike of the Slate Beds in Cornwall and Devon—Notice of an issue of Inflammable Gas in the Morro Velho Gold Mine, Brazil—Observations on the Gold Fields of the Pacific, and their Probable Extent—And Notice of the Copper Mines at Alderley Edge, Cheshire; Rough Notes on the Bantry Bay District; Notes on Mining and Metals—No. II.; Cornish Mine Photographs—Second Series—No. IV.; The Government Mine Inspectors' Reports; Cornish Mining Maxims—No. VII.; "The First Locomotive;" The Low Moor Iron-works; Chemistry and the Manufacture of Gas; Aluminium and its Alloys; Preventing Accidents on Railways; Boring Machinery; The United States claiming Quicksilver Mines worth Forty Million Dollars; The Workshops on the Tyne, &c., &c.

FOURTEEN LIVES LOST IN THE PRIMROSE COLLIERIES, NEAR NEATH.

A great sensation was created in Neath, on Wednesday last, by a report that a number of men had lost their lives in the Primrose Collieries, which are situated about three miles and a half north of Neath. This report was true; fourteen men and boys were killed, and eight more are seriously injured. These collieries belong to Messrs. Morgan and Lewis, are free from fire-damp, and are said to be well ventilated. It appears there are two distinct workings, or mines, which are connected by a heading or drift. A steam-engine has been recently erected in the north pit, and a fire has been kept up under the boiler for the last few days, in order to dry the masonry. The smoke and products of combustion, it appears, have to pass along the connecting drift between the two collieries, and so into the return air-way, a door having been fixed at the end of the drift next the south heading, where it is intended to build a brick and mortar stopping. On Wednesday morning about 60 men went to their work in the south colliery, when the ventilation was as good as usual. At about 8 o'clock an eruption of noxious gases filled the south heading, and almost instantly killed the men and boys exposed to it. It first affected them with pain and quivering of the limbs, they then lost the use of their legs and fell; some few who fell have recovered, but to most of them it was fatal. It was a singular circumstance that the lights were not extinguished, some of the candles having been found burning several hours afterwards. The bodies of the unfortunate sufferers were all brought up the pit on Wednesday afternoon. It is supposed that the door in the south heading, and at the end of the drift which communicates directly with the underground engine in the north colliery, had been opened and not again closed. Indeed it is said to have been found partially open after the accident had occurred. This will account for the accident, as in that case the carbonic acid gas and the products of combustion from the engine fires would instantly flood the south heading. In addition to the human life thus lamentably lost, eight horses have been killed. Much heroism was displayed by the colliers in endeavouring to rescue their fellow-workmen, and it is said two men perished in this noble attempt. Every possible alleviation has been rendered by the highly esteemed owners to the families of those who have lost their lives and to the sufferers who survive. On Thursday the colliery was restored to its usual state, and was examined by Mr. Evans, Her Majesty's Inspector, for the first time since his appointment. It was inspected by the late Mr. Herbert Mackworth four years since.

PROSPECTS OF THE IRON TRADE.

The iron trade, which may be said to be now convalescent, promises to attain, within a few years at most, a magnitude and prosperity far beyond its development at any former period. While Wolverhampton congratulates itself upon a "better feeling"—while Liverpool shipowners, sometimes forced to accept 4s. 6d. per ton to New York, can now obtain twice the money without difficulty—while American stocks are just now unusually light, and American payments are improving—while furnaces are "blowing in," not only in the great seats of the manufacture, but at Stockton, Jarrow, and elsewhere, and while even new works are being started, as at West Hartlepool—it is easy to discern, beyond all these indications, others of even greater import. The increasing dissatisfaction, in other countries, under the working of the "protective" system, points to its final abandonment. While French iron is quoted at Paris at more than 40 per cent. above Scotch metal, duty paid, the iron manufacture of the basin of the Rhone and Loire is in a most distressed condition; 4000 workmen have been thrown out of employment, and those at work are on short time and reduced pay, while furnaces are daily blowing out, and great establishments, like those at Bourges and Roanne, are on sale at merely nominal prices. It is admitted that the "protection of the iron trade" costs the agricultural interest of France 4,000,000l. yearly, the manufacturers twice that sum, and that it has added from 8,000,000l. to 12,000,000l. to the cost of French railways. Meanwhile, the coasting trade is suffering severely, sympathising, as it always will, with the general commerce of the country. Contrast the figures of the French customs, showing the coasting trade of 1847, with those giving the facts for 1856—

Voyages made	105,539	1856	104,138
Men employed	441,779	1856	433,215
Tonnage	2,627,505	1856	2,432,813

In the United States, where a 30 per cent. *ad valorem* duty was levied upon imported iron from 1846 to 1857, there is a strong disposition towards a free trade policy. The slight reduction of the duty to 24 per cent. only took effect just before the commercial disasters of the last autumn, and could not yet have had any decided influence. The urgent necessity that exists in the States for cheap iron, the alienation of much of the sympathy that formerly existed in favour of the home manufacture, and the increasing popularity of free trade principles, all point to the early abolition of all, or nearly all, of the American iron duties. Colonisation is opening up in Canada, in India, and in Australia, new markets for our iron: 250,000 emigrants a year need iron in numbers for their new homes; they cannot carry it with them, nor do they produce it when it is wanted, but they must send home to obtain it. Although each one before emigrating was a customer, to some extent, of the home iron trade, his departure increases that trade by stimulating the production of new machinery to supply the place of his labour, while nearly his entire subsequent demands for iron are a direct addition to the trade of the mother country. Foreign railways, within the next few years, will draw largely on the means of English iron production; 10,000 miles will be pushed forward in the United States, saying nothing of Canada, nor of the possibility that a Pacific Railway of between 2000 or 3000 miles may be, before long, undertaken. Russia has a system of 2500 miles or more, which the Czar intends shall be carried resolutely forward. It is not long, we believe, since a Russian order for 100,000 tons—no contemptible quantity—of rails was received in Wales. The South Australian Company has over 1200 miles of line projected, from which the English iron interest may reasonably derive some benefit. Besides new markets in the east, and in the Pacific, Brazil, Sweden, Algeria, Spain, and other countries are also coming into our markets for rails and railway plant.

Iron ships will maintain an increasing demand for iron. It has been prophesied that iron and steam would eventually drive wood and sails from the ocean. The following figures are significant:—

Steamers built in Great Britain	1842	1850	1857
Sailing vessels	46	68	228
	632	621	1050

Totals..... 698 680 1278

Per centage of steamers to sailing vessels..... 7 100 22

The absolute, although not relative, increase of sailing vessels has been due only to the extension of the Indian and Australian trades, in which steam-vessels like the *Great Eastern*, large enough to carry their coals for the round voyage, might perhaps soon drive the sailing ships off the coast.

Future steam-ships will be built of iron or steel; experience has most fully determined that point. Numberless iron steam colliers will find their places in our coasting trade. Making 40 voyages a year, taking in and clearing with cargoes of 700 tons in one tide, they will drive off the venerable craft, some quite 80 years old, which now manage to get in ten or twelve times a year from Newcastle, sometimes to go to pieces in the Thames from sheer decay. With coals in three days by sea, at 5s. a ton, the railways may decline some of the business which even at 12s. a ton (½d. a mile for nearly 300 miles), is of very doubtful profit—more likely a positive loss, with certainly little gain to the consumer.

Iron is regarded with increasing favour, by railway engineers, as a material for the permanent way throughout. Were either of the most successful forms of iron sleepers to be adopted throughout our railways, 1,000,000 tons of iron would be required. Iron architecture is making rapid strides in other parts of the world, whatever may be the favour or disfavour to which it is destined here. In a country paying so dearly for its iron as the United States, that material is coming into decided preference for the best class of building. There are, probably, already 200 very extensive and highly embellished cast-iron fronts in New York, where their adoption has apparently only commenced. The remote western cities are taking up the improvement with remarkable spirit, and iron buildings of colossal proportions and palatial splendour are rising in Chicago, Cincinnati, and in many of the smaller towns. The demand thus opened up for iron promises to become enormous, and its amount. The rapid multiplication of gas and water-works in the United States furnishes also a growing market for our iron. The Brooklyn Water-Works, now being built, will have 50,000 tons of iron pipes. The Washington Water-Works, building by the National Government, are to be laid with Scotch cast pipes, notwithstanding the outcry made by the American iron founders.

In works of construction, the mechanical engineer is trenching more and more closely upon the province of the civil engineer, and upon that of the architect. And the mechanical engineer almost instinctively prefers iron to the materials more commonly employed by his perhaps more professional, but certainly less practical brethren. Iron architecture is making rapid strides in other parts of the world, whatever may be the favour or disfavour to which it is destined here. In a country paying so dearly for its iron as the United States, that material is coming into decided preference for the best class of building. There are, probably, already 200 very extensive and highly embellished cast-iron fronts in New York, where their adoption has apparently only commenced. The remote western cities are taking up the improvement with remarkable spirit, and iron buildings of colossal proportions and palatial splendour are rising in Chicago, Cincinnati, and in many of the smaller towns. The demand thus opened up for iron promises to become enormous, and its amount. The rapid multiplication of gas and water-works in the United States furnishes also a growing market for our iron. The Brooklyn Water-Works, now being built, will have 50,000 tons of iron pipes. The Washington Water-Works, building by the National Government, are to be laid with Scotch cast pipes, notwithstanding the outcry made by the American iron founders.

The determination of the Government to increase its defences will also lead to an in-

creased demand for iron. This increase of armament will go on in a time of peace, during which we shall not lose foreign markets, owing to the disturbance of all, and the cessation of some branches of their industry by war. Although war of itself requires a large supply of iron for its prosecution, this amount is, doubtless, far less than what would be required in the same time by the arts of peace, which war so severely crushes. The future of the British iron interest is highly encouraging.—*The Engineer.*

The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET—LONDON, OCT. 15, 1858.		BRASS.		SILVER.	
COPPER.		BRASS.		SILVER.	
Copper wire	..... p. lb. 0 1 3/4-1 1/2	Sheets	..... 104-114.	Per Ton.	..... 94-95.
ditto tubes	..... 0 1 1/4-1 1/2	Wire	..... 124-125 1/2.	Per Ton.	..... 124-125 1/2.
Sheeting & bolts	..... 0 1 1/4-1 1/2	Tubes	..... 124-125 1/2.	Per Ton.	..... 124-125 1/2.
Bottoms	..... 0 1 1/4-1 1/2	Foreign Steel	..... none.	Per Ton.	..... 124-125 1/2.
Old (Exchange)	..... 0 0 9/4-1 0	Swedish, in kegs (rolled)	..... none.	Per Ton.	..... 124-125 1/2.
Best selected	..... p. ton 101 0-0	(hammered)	..... 20 10-0	Per Ton.	..... 124-125 1/2.
Tough cake	..... 98 0-0	ditto, in bags	..... 21 0-0	Per Ton.	..... 124-125 1/2.
South American	..... 98 0-0	English, Spring	..... 18 0-23 0	Per Ton.	..... 124-125 1/2.
Tile	..... 90 0-0	QUICKSILVER	..... p. lb. 0 1 1/2-2 0	Per Ton.	..... 124-125 1/2.
IRON.	Per Ton.	Foreign	..... 23 0-0	Per Ton.	..... 124-125 1/2.
Bars, Welsh, in London	..... 6 15 0-0	To arrive	..... 22 15 0-23 0	Per Ton.	..... 124-125 1/2.
ditto, arrive	..... 7 0 0-0	ZINC.	..... 31 0-0	Per Ton.	..... 124-125 1/2.
Nail rods	..... 7 10 0-0	In sheets	..... 31 0-0	Per Ton.	..... 124-125 1/2.
St. Stafford, in London	..... 8 0 0-9 0 0	TIN.	..... 118 0-0	Per Ton.	..... 124-125 1/2.
Bars	..... 8 10 0-9 10 0	English, blocks	..... 118 0-0	Per Ton.	..... 124-125 1/2.
Hoops	..... 9 5 0-9 15 0	ditto, Bars (in barrels)	..... 119 0-0	Per Ton.	..... 124-125 1/2.
Sheets, single	..... 9 10 0-10 10 0	ditto, refined	..... 121 0-0	Per Ton.	..... 124-125 1/2.
Pig, No. 1, in Wales	..... 8 15 0-9 15 0	Banca	..... 117 0-0	Per Ton.	..... 124-125 1/2.
Refined metal, ditto	..... 4 10 0-5 5 0	Straits	..... 115 0-116 0	Per Ton.	..... 124-125 1/2.
Bars, common, ditto	..... 3 5 0-6 10 0	TIN-PLATES.	..... 1 12 0-1 15 0	Per Ton.	..... 124-125 1/2.
ditto, railway, ditto	..... 6 7 0-6 10 0	IC Charcoal, 1st qua. p. bx.	..... 1 12 0-1 15 0	Per Ton.	..... 124-125 1/2.
ditto, Swed. in London	..... 12 15 0-15 0 0	IX Ditto 1st quality	..... 1 15 0-2 10 0	Per Ton.	..... 124-125 1/2.
In do to arrive	..... 12 15 0-15 0 0	IX Ditto 2d quality	..... 1 10 0-1 11 0	Per Ton.	..... 124-125 1/2.
Pig, No. 1, in Clyde	..... 2 14 0-2 15 0	IX Ditto 3d quality	..... 1 16 0-1 17 0	Per Ton.	..... 124-125 1/2.
ditto, in Tyne & Tees	..... 2 19 0-3 2 0	IX Ditto	..... 1 11 0-0	Per Ton.	..... 124-125 1/2.
ditto, forge	..... 2 17 0-0	Canada plates	..... p. ton 15 0-15 5 0	Per Ton.	..... 124-125 1/2.
Staffordshire Forge Pig	..... 4 10 0-5 0 0	In London; 20s. less at the works.	..... 15 0-15 5 0	Per Ton.	..... 124-125 1/2.
Welsh Forge Pig	..... 3 0 0-3 5 0	Yellow Metal Sheathing	..... p. lb. 9 1/4-0	Per Ton.	..... 124-125 1/2.
LEAD.	Per Ton.	Wetterstedt's Pat. Met.	..... p. cwt. 2 0	Per Ton.	..... 124-125 1/2.
English Pig	..... 21 10 0-22 10 0	Indian Charcoal Pigs	..... - 7 10 0	Per Ton.	..... 124-125 1/2.
ditto sheet	..... 22 10 0-0	In London	..... - 7 10 0	Per Ton.	..... 124-125 1/2.
ditto red lead	..... 23 10 0-0	At the works, 1s. to 1s. 6d. per box less.	..... - 7 10 0	Per Ton.	..... 124-125 1/2.
ditto white	..... 25 10 0-0		..... - 7 10 0	Per Ton.	..... 124-125 1/2.
Spanish	..... 20 0 0-20 10 0		..... - 7 10 0	Per Ton.	..... 124-125 1/2.
American	..... none.		..... - 7 10 0	Per Ton.	..... 124-125 1/2.

REMARKS.—The demand for metals has continued tolerably good, and prices have for the most part been well maintained.

COPPER.—The enquiries for shipment are still of a limited character, both with regard to cake and manufactured; but there is a slight improvement in the home trade; the market altogether is quiet, yet steady, and no change in prices, either higher or lower, appears at present probable.

IRON.—In rails there is a fair prospect of higher rates being realised; the amount of work already in hand is deemed almost sufficient to carry ironmasters through the winter, and large orders are anticipated in the ensuing spring; the price has, consequently, somewhat stiffened, and very little could be bought at less than 6½ to 6½ 10s. per ton at the works. Merchant bars have also participated to a slight extent in the improved state of the market, and 5½ 15s. per ton, f.o.b. here, is the lowest price quoted. Staffordshire iron has undergone no alteration. Swedish iron without change. Scotch pigs have been quoted from 54s to 54s 6d., the price regulated by the increase or decreasing demand, and finally closing at 54s 3d. to 54s 6d., mixed number, g.m.b., f.o.b. in Glasgow.

LEAD.—Nothing important has taken place to disturb the evenness of our market; our quotations are the same as last.

SILVER.—An unsettled feeling has given vent to a few holders selling several parcels freely at reduced prices, business being transacted at 23½ 10s., and gradually receding to 22½ 17s. 6d.; since which 50 tons have changed hands at 23½; the market closing steadily at the latter figure.

TIN.—English is in good request at former rates. Foreign saleable, but holders hold off, in anticipation of a further improvement. Straits has been sold at 116½, with three months prompt. Banca, 117½, cash.

TIN-PLATES.—In fair demand, prices upheld.

STEEL.—For shipment, a few parcels of Swedish keg have been bought under our quotation; but as stocks are now low for the remaining portion, being only a small lot, the sellers require 20½ 10s.

GLASGOW, OCT. 14.—Since our last report the market for pig-iron rallied to 54s 6d., at which a considerable business was done, and the price has experienced only trifling fluctuations for the last few days. No new feature has presented itself, and it is apparently only speculation, coupled with an easy money market, which maintains prices. No. 1, Gartsherrie, 69s; No. 1, g.m.b., 53s 3d.; No. 3, g.m.b., 52s 9d. Shipments: Foreign, 4183 tons; coastwise, 4261 tons = 8444 tons, against 9707 tons last year.

LIVERPOOL, OCT. 14.—The demand for manufactured iron has been, during the past week, to a fair extent, considering the general depression which has for so long a period characterised our metal market, and for Welsh bars the slightly advanced rates are obtained without difficulty. Rails are still in request, at current quotations. For Staffordshire iron there has been less enquiry during the week; prices are, nevertheless, without change. The price of Scotch pig-iron has scarcely varied, and the business done has been but limited. The shipments for the week are 8444 tons, against 9707 tons for the corresponding week of last year. There is no alteration in the tone of the market as regards tin, tin-plates, copper, and lead. For each of these several articles a moderate demand exists, at unaltered rates. The following are the quotations:

CONTRACTS.—The Consulate of France requires tenders for 15,000 to 17,500 tons of coal, to be delivered at Algiers, Martinique, Guadaloupe, &c.—Oct. 25.

Drake Walls ..	0	0	0	0	68	12	6	2	617	12	6	—Dunbar & Co.
ditto	11	0	0	0	61	10	0	676	10	0	—Bissoe Company.	

1855	.....	4948	7 7	..	36,904	16 0	..	132	19 0	..	108	14 0	..	126	0
1856	.....	3971	7 7	..	27,407	19 0	..	126	10 0	..	90	9 0	..	107	10
1857	.....	4158	6 6	..	27,547	1 6	..	139	10 0	..	98	12 0	..	121	10

The copper in the ore expresses the nett price per ton of copper paid to the miner.

THE PROGRESS OF MINING IN 1857, BEING THE FOURTEENTH ANNUAL REVIEW.
By J. Y. WATSON, F.G.S., Author of the *Compendium of British Mining* (published in 1843), *On Mining among Mines and Miners*, &c.
The FOURTEENTH ANNUAL REVIEW OF MINING PROGRESS appeared in a SUPPLEMENTARY SHEET to the *MINING JOURNAL* of Jan. 2, 1858.
A FEW COPIES OF THE REVIEW OF 1855, containing Statistics of the Metal Trade, the Dividends and Percentage Paid by British and Foreign Mining Companies, and the State and Prospects of upwards of 200 Mines. Also a FEW COPIES OF THE REVIEW OF 1852, 1853, and 1854, MAY BE HAD on application at Messrs. WATSON AND CUELL'S Mining Offices, 1, St. Michael's-alley, Cornhill, London.
Also, STATISTICS OF THE MINING INTEREST. By W. H. CUELL.

WATSON AND CUELL'S MINING CIRCULAR.
Published every Thursday morning, price 6d. or £1 1s. per annum, contains Special Reports of Mines, and the Latest Intelligence from the Mining Districts, from an exclusive resident agent; also, Special Recommendations and Advice upon all subjects connected with Mining, and interesting to investors and speculators. A Record of Daily Transactions in the Share Market, Metal Sales, and General Share Lists, &c. Edited by J. Y. WATSON, F.G.S., and published by WATSON AND CUELL, 1, St. Michael's-alley, Cornhill.
N.B. Looking at the causes for the present depression in mining shares, Messrs. WATSON AND CUELL have made a selection of a few dividend and progressive mines to pay good interest, with a probability, also, of a rise in value, the names and particulars of which will be furnished on application.

INVESTMENTS IN BRITISH MINES.
Mr. MURCHISON'S REVIEW OF BRITISH MINING FOR THE QUARTER ENDING 30th SEPTEMBER, 1857, with Particulars of the principal Dividend and Progressive Mines, Table of the Dividends Paid in the last Three Years, &c., and a SPECIAL REPORT ON TOLVADEN MINE, by Capt. CHARLES THOMAS, IS NOW READY.
price One Shilling, at 117, Bishopsgate-street Within, London.
Reliable information and advice will at any time be given on application.
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1850 TO 1st MAY, 1858, INCLUSIVE.
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IS MINING FOR METALLIC ORES A LEGITIMATE AND PROFITABLE CHANNEL FOR INVESTMENT? OR IS IT NOT?
By JOHN ROBERT HUNT.
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London: John Weale, 59, High Holborn.

Notices to Correspondents.

* Much inconvenience having arisen, in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be regularly filed on receipt: it then forms an accumulating useful work of reference.

THE COST-BOOK SYSTEM, AND LIMITED LIABILITY.—I am a shareholder in several mines working on the Cost-book System, which I understood when I bought was limited liability, but from contradictory accounts (see letters, &c., in your Journal) I have now reason, I believe, to alter my opinion. Such a dreadful catastrophe as the case of the Western Bank of Scotland must make such a system rather uncomfortable as to the extent of our liabilities. Can you, therefore, tell me, through your Journal, whether the Cost-book Principle is limited liability or not?—T. A.: Manchester.

[In Cornwall and Devonshire, cost-book companies are under the jurisdiction of the Stannaries Court, which is a court of law and equity, and as it is guided much by customs which are favourable to the shareholders, cost-book companies in those counties may be considered as conferring a species of limited liability.]

FOREIGN SELLING.—I perceive in the arrivals from Chili there is mentioned regulus as well as copper ore. The reduction of the ore into regulus is the most difficult part of the operation, and when companies can effect this, the production of rough copper is a comparatively easy process. By carrying out the reduction from beginning to end, there would be a great saving in freight, increase in value to the company, and no chance of being tricked at Swansea.—ALPHA.

GREAT WHEAL VOR.—We shall give some information in reply to "A Shareholder" (Lard) in next week's Journal.

WEST CARADON MINE.—A committee of investigation being now appointed, we may hope that in the course of a few weeks the results of their labours will be laid before us. I have no doubt that Mr. Crouch will be able to justify all the allegations which have from time to time been whispered as to working Cradock Moor at the expense of West Caradon, and several other subjects, which will in due course be brought before the committee. The mine, I hear, is progressing favourably, and we may soon expect to return to our former dividend-paying state.—C. L. M.: Brompton.

TREWATHA MINE.—J. H. (Canterbury-square).—The last dividend paid was 3s., in April, 1857, making a total of 12. 12s. per share, whilst the calls, including the one made at the last meeting, amounted to 2l. 17s. There are only 58 shares in arrears of call, which were held by parties now dead or some abroad. This reason the dividends stopped arose from the mine getting poor in the 40, but it has been vigorously prosecuted, and is now down to the 98. On reaching the 100 they expect to resume dividends, as other mines in the immediate locality have proved rich at that depth.

GOLD IN ENGLAND.—It is a matter of surprise to me that, while so much has been expended in foreign gold mining schemes, the localities in England where this metal is known to exist in not inconsiderable quantities have hitherto not been proved. I allude more particularly to Dolgelly, in North Wales, from the mines of which large specimens of the precious metal have been taken. I am aware that the search for gold at Wicklow, during the latter part of the last century, has given a distaste to the prosecution of the precious metal in the British Isles. The mania by which Mr. Hiram Berdan obtained such large profits must be looked upon as a great reproach and a disgrace to all who were in any way concerned in the propagation of that monster delusion. That gold exists in England there is no question, and that in several districts, if worked, I believe it would pay. The true cause why really scientific men have not taken up this question is the encouragement given by the public to the many charlatans who have within the last few years been pressing their several inventions, which in every instance have turned out to be failures, and can merely be regarded as means to extort money.—SCAP.

NOTES ON THE ISLE OF MAN.—In looking over your Journal of Sept. 25, I observe the Rough Notes on the Isle of Man, from a correspondent. In alluding to the mineral veins a short distance beyond the Chasms, I find he is mistaken in saying the blende contained only 7 ozs. instead of 17 ozs. of silver to the ton, which has been proved.—M. GHOSE: Oct. 12.

"T. R." (Portsmouth).—A company of highly influential gentlemen was in the course of formation for the purpose of copper smelting about twelve months since. The locality where they proposed to erect the works was in the vicinity of Liverpool. The plans were drawn out, and the preliminary arrangements nearly effected. The crisis which occurred in the money market prevented the realisation of the project, and it has remained in abeyance until the present period. It is anticipated that it will be launched into public notice when favourable conjunctures will allow.

WOLFRAM—CARBONATE OF BARYTES.—The letter of "M. E." has been forwarded to the party interested.

GREAT CARADON AND SLADE MINING COMPANY.—In the Journal of Saturday you quote (in error) the price of these shares at 2s. 6d. each, which has occasioned much uneasiness to some of the shareholders. I believe that no transfers have been hitherto lodged at this office for registration which express a smaller consideration than 30s. per share, and one arrived this morning when it appears that the shares were sold for £2 each.—J. BEARDMORE WATKIN, Sec.

COPPER IN DURHAM.—Some months since a notice appeared of a discovery of copper ore in this county in a railway cutting. I have heard many who are intimate with the localities of Durham and Cumberland state they are of opinion that this must be somewhere situated on the ridge which passes from one county to the other. If the correspondent who forwarded the account were to state the precise locality where the discovery was made he would be conferring a favour on several enquirers, who are sceptical as to the existence of copper ore in that district.—T. P.

ALLEN MINING ASSOCIATION.—The reports that have come to hand are more favourable than those we have obtained of late. I see, however, that Capt. Charles Trevelack has arrived in England. I know not whether he is likely to return to Kaaford, but I trust that no ill-judged economy on the part of the management has induced the resignation of the captain. There is an old saying, "Non possumus omnia;" and although the local direction may be very saving, yet there are occasionally retrenchments which are more expensive than a judicious expenditure usefully laid out. If a man is required to do work well he ought to be paid in proportion, and when a too great niggardliness is exercised the accounts will show probably that, although salaries are lessened, the expense will be higher, owing to the fact that no efficient supervision has been thoroughly exercised.—W. B.

GREAT SHEBA MINE.—Can any one say when the next meeting of shareholders is to take place?—A SHAREHOLDER: London, Oct. 15.

COPFORD SMELTING COMPANY.—It is now nearly twelve months since Mr. Thomas and staff left England for Calder, and although, in all probability, the directors have been informed as to his progress, yet hitherto I have seen no official information accorded to the shareholders. We cannot expect that smelting has already commenced, but we may fairly anticipate that the furnaces are already erected, and that in the course of a few months some results will be arrived at. From the well-known capabilities of Mr. Thomas, no one can apprehend a failure; still, however, it would be some satisfaction to know how far the works are erected, and when there is a likelihood that active operations will commence.

IRON SHIPBUILDING.—The destruction of the *Austria* by fire shows the necessity that some means should be devised for the purpose of affording safety to passengers and crew. Under all circumstances, it would have been expected that an iron-built ship should at least be fireproof. Many of the constructors of these vessels differ as to the manner in which they should be built; each, however, advocates his own views, and some of these regardless of expense. One sanguine projector thinks that six millions of the public money would be well spent in testing his invention, without entering into any of their respective merits, or discussing questions which have been so often posed before the public that all are weary of them, and, consequently, no longer care to listen to those concerned with them. This cannot be denied—the mode of obtaining Lloyd's certificate, under the present regulation, is too lax; and that these ships should be constructed of the best materials, and in the most perfect manner. It would be much better, and the public would have greater faith, if they were to see projectors doing, instead of garrulously talking of what they believe they are capable of effecting, but which their general hearers only imagine are emanations of delusion, combined with braggadocio.—VERITAS.

NORTH DOLGOATH MINE.—In the City Article of last week's Journal mention is made of North Dolgoath Mine as being involved in a dispute with the adventurers of West Dolgoath, and that the latter party claim the lode in which a discovery of silver has recently been made as being in their sett. Allow us to correct the erroneous impression this statement would convey to the public. The discovery was made a few feet behind the present deep adit east, which is not in the place of ground disputed, and the course of the lode, as well as the underlay, have a direction away from the point in question, as is plainly indicated in the plans, which may be seen at the offices of the North Dolgoath Mine.—VIVIAN AND HAYWARDS: Old Broad-street.

ADVERTISING MINING SHARES.—Mr. S. Richards has sent a very long letter, in reply to the remarks of Mr. Crofts, in last week's Journal, and in justification of his system of introducing his property to the public for sale. We have not space for Mr. Richards's communication, but he is very emphatic in denouncing Mr. Crofts's interference with him, and in conclusion, he remarks—"I still maintain that the system of advertising prices legitimately of all shares really for sale is a fair and honourable mode of action, and a far safer guarantee for the investor than the specious writings of paid touters, who have no personal interest in the undertakings they recommend, but puff up certain things for which they are paid, irrespective of their real worth or ultimate value."

SHEET ROLLS.—Will some one of your correspondents be kind enough to inform me the length of the longest sheet rolls now in use for the purpose of rolling either sheet iron or sheet copper? and the name of the party, or of the works, having the like in operation in England, with any other particulars they may consider of interest?—J. B.: Malpas, Cheshire, Oct. 10, 1858.

COAL-BURNING LOCOMOTIVES.—The essentials of a coal-burning locomotive are—large grate surface, provision for the admission of air above the fuel to combine with the gaseous elements of the coal, a room combustion chamber to permit the mixture of the air and coal gas and the ignition of the latter, and a fire-brick diaphragm to maintain a temperature above that at which gases ignite. It is a matter of indifference in what part of the furnace of combustion chamber the air is introduced, provided it enter before the temperature of the gas has been reduced below that of ignition, and in divided jets, through small orifices about half an inch in diameter, to secure its thorough commixture with the gases; the aggregate of these openings should equal one square inch per foot of grate surface for every 3 lbs. of coal burnt per square foot of grate surface per hour. The recent introduction of fire-brick diaphragms into the combustion chambers and flues of steam-boilers is an immense acquisition. Some experiments were recently tried at Sheerness with a boiler proposed by Admiral Tucker and Mr. Blaxland, I believe, and the greatest success obtained.—D. A.

FORRELLS UNITED.—"T. H." (Hackney).—This mine, which is now for sale, was divided into 2400 shares, 9d. paid, and was admitted on the Stock Exchange. It will, no doubt, have the same privilege if the purchaser conforms to the necessary rules.

WHEAL EDWARD.—"A Shareholder." can obtain the information he requires on application to the secretary, at the office, as well as through the Journal.

QUARTZ REDUCTION COMPANY.—The time (Oct. 6) for the directors deciding whether they should accept the offer of Mr. Squire now passed. Col. Kennedy, we were told, was to be put in possession of the secret. If it is practicable, and we are to be the richest company in the world, through the instrumentality of Mr. Squire, the sooner this desired result is arrived at the better. The directors must be fully aware that not all the eloquence they possess will extract another shilling from the pockets of the shareholders, who have lost so much in this and its predecessor—the *Agua Fria*.—J. P.: Exeter.

COLOGNE MINING COMPANY.—At the last annual meeting the constitution of the company was considerably modified, and a resolution confirmed authorising the sale of such mines as they were unable to work for want of capital. The various alterations that have taken place will be submitted to the meeting on Oct. 29.

PENBROKE AND EAST CRINNIS.—"R." (Rath).—These are two separate mines, worked under one company. It is calculated that the East Crinnis at the present time would pay cost, if not dividends, but the great drawback has been the large outlay on Penbroke, without any result. There are a few shares held in Cornwall, but the principal body of adventurers reside in London.

WHEAL EDWARD.—In Mr. Wm. Watson's letter, in last week's Journal, there is an error. Instead of "at any value," it should read "at any level."

COLA MINING COMPANY.—From the period that this company was formed until its dissolution neither directors, agents, secretaries, or engineers appeared willing to afford any information to the proprietary. The last we heard was that the property was to be put up to auction; I have seen no advertisement of such a sale. In common fairness to the proprietary, I think this should be put before the public in some journal with a wide circulation amongst mining people. It may suit some interested parties to insert the notice of sale in an obscure country paper, and thus obtain for it just enough to cover the liabilities of a property on which upwards of 6000l. has been expended. I trust that the proprietary in general will not allow the plant thus to depart from them. I believe there are several solicitors connected with the company, and they would, no doubt, give their advice as to the best mode of proceeding.—G. R. S.: Rotherhithe, Oct. 14.

STINNEY WHEEL ROLLER.—"W. M." (Leeds).—The offices of the company will be removed from Great Wheel Vor in a short time, when they will be advertised in the Journal. The call made on the shares held in trust by the committee of Great Wheel Vor was paid under protest, but every endeavour is being made to arrange matters between the two companies, without having recourse to law proceedings.

Erratum.—In last week's Journal, in Lady Bertha Mine, Carter's winch was stated per ton in place 25l. per fm., and in another 30l. per fm.; it should have been 45l. per fm.

THE MINING JOURNAL.

Railway and Commercial Gazette.

LONDON, OCTOBER 16, 1858.

In another column we give the first part of our usual epitome of Mr. ROBERT HUNT'S very elaborate Statistical Returns of the Mineral Produce of the United Kingdom. Notwithstanding the unsatisfactory condition of commerce generally during the greater part of last year, the value of the mineral produce of the United Kingdom exceeded twenty-five millions, and the value of the metals as obtained from the furnace at the market prices of the year was no less than 18,105,708l.

Of the 25,961,649l. worth of mineral raised, coal, of course, contributes the largest proportion, iron, copper, lead, tin, salt, pyrites, &c., contribute but a small amount, their aggregate value being under 14,000l.

The produce of TIN ORE in 1857 was 9783 tons, yielding of metallic tin 6582 tons, which is an increase of 433 tons of ore and 465 tons of metal, compared with the production of 1856. The average price of tin was, moreover, higher during 1857 than in any year since 1813, so that the money value shows more than a corresponding advance. The importation of tin likewise shows a satisfactory decrease, and one-fifth of the total import was derived from our colony of Victoria.

With regard to COPPER, the total produce for the United Kingdom was 218,689 tons of ore, worth 1,560,922l. 11s. 6d., and yielding 17,375 tons of metal. Of this amount Cornish and Devon mines gave 191,798 tons of ore, worth 1,201,270l. 15s.; Irish, Welsh, and other mines, 10,929 tons, worth 126,902l. 6s. 6d., and the sales by private contract, not classified into districts, amounted to 16,952 tons, worth 232,749l. 10s. Mr. HUNT remarks that in the computation of the copper ore produce there has always arisen much difficulty, from the circumstance that very large quantities of ore are purchased by private contract, alike from British and foreign mines, and it has been almost impossible to separate these one from the other. It is believed, however, that this has been more closely effected in the present return than in any previous one. Our importations in 1857 were of ore 75,832 tons, and of regulus 19,262 tons, against 71,678 tons of ore and 11,124 tons of regulus in 1856; whilst our exports of metallic copper in 1857 were 25,241 tons, valued at 2,815,831l., against 22,863 tons, worth 2,648,259l.

The total quantity of LEAD ORE raised in the United Kingdom during the year under consideration was 96,820 tons 10 cwt. This produced of metallic lead 69,266 tons 5 cwt., from which there were separated 532,866 ozs. of silver. The estimated value of the ore was 1,428,095l., and the market value of the lead produced therefrom 1,528,852l.; the value of the silver, at 5s. per oz., was 133,216l. 10s. The foreign silver ores imported and sold amounted to 5190 tons, and contained 846,569 ozs. of pure silver. During the past three years the variations in the production of metallic lead and silver from British mines have been—in 1855, lead 65,529 tons, silver 561,906 ozs.; in 1856, lead 73,129 tons, silver 614,189 ozs.; in 1857, lead 69,266 tons, silver 532,866 ozs. The produce of British mines shows a decrease of 3863 tons of lead, and 81,322 ozs. of silver. Our importations of lead exhibit a falling off of about 3000 tons; and of foreign silver ores the decrease has been 1440 tons.

With regard to ZINC, Mr. HUNT states that the British zinc ores are more eagerly sought for, and that, consequently, they command an improved price. Much attention has been directed to the metallurgy of zinc; and smelting processes, which promise both economy and dispatch, are being introduced. The total quantity of zinc ore produced in 1857 was 9289 tons 11 cwt., valued at 30,982l. 11s. 11d. Our importations of zinc amounted in 1857 to 18,001 tons, and 429 tons of oxide. The exports were—British, 3123 tons 10 cwt.; and foreign, 1379 tons 18 cwt.

The quantity of SULPHUR ORES (MUNDIC) sold in 1857 amounted to 74,679 tons 2 cwt., valued at 63,804l. 14s. These ores are now claiming much and deserved attention.

The IRON ORES raised in 1857, amounting to 9,578,281 tons, were converted by 628 furnaces into 3,659,447 tons of metal, the value of which at the furnace was 11,000,000l. Mr. HUNT remarks, that the very unfortunate position of the iron trade towards the close of 1857, when about 80 blast furnaces were blown out, naturally led to a belief that the falling off in the make of pig-iron would have been very considerable. It is found, however, that in 1857 we made 3,659,447 tons, against 3,586,377 tons in

the preceding year. This increase in the make has been explained by the fact that up to the crisis in October enormous quantities were made in some works, and thrown into the market at greatly reduced prices, to endeavour to avoid the consequences of the pressure which was already casting a dark shadow upon our metallurgical industries.

There was a decrease in the quantity of COAL raised in 1857 to the extent of 1,250,748 tons; the produce for last year having been 65,394,707 tons, against 66,645,450 tons in 1856. Durham and Northumberland, of course, stand first on the list; then Yorkshire and Lancashire, each yielding more than the whole of Scotland; and Staffordshire, Worcestershire, and South Wales, follow next in succession.

SALT, ARSENIC, NICKEL AND COBALT, BARYTES and sundry rarer minerals, which in the aggregate little exceed 500,000l., bring the grand total to nearly 26,000,000l., which must prove that our mineral industry contributes in no small degree to our commercial position. The well-known usefulness of mineral statistics has been sufficient inducement to most parties connected with mining to furnish the particulars of their operations; and although there has been no enactment to compel a return, Mr. HUNT feels himself called upon to acknowledge the courtesies and assistance he has almost invariably received, and which has tended materially to place mining on a more healthful basis.

In future Journals we shall give a complete abstract of the entire return, embracing all the features of our general mining industry.

In his last week's report from Yorkshire, Derbyshire, and Lancashire, our valued correspondent makes an able defence for Mr. HEDLEY against the animadversions on the conduct of the Inspectors which have recently appeared in our columns. He maintains that Mr. HEDLEY has well and energetically discharged his onerous duties, and proves it by stating that—"Mr. HEDLEY has not only inspected the whole of the collieries of his district three and four times during the three years of his appointment, but the most dangerous ones three times a year; and that instead of regarding the Act as a penal one, he only appeared before the magistrates twice in 1857, and once in the current year." We most cheerfully admit that Mr. HEDLEY has nobly done his duty, and deserves, as doubtless he will receive, the approbation of the public. But how is it that Mr. HEDLEY's reports to the Secretary of State are silent on this subject, and that he has studiously kept the public in the dark as to the number of collieries actually inspected, the more especially as the want of, and the necessity for, such information has been frequently mentioned in our pages during the last five years? If the Inspectors withhold information, they have no reason for complaint if their conduct is at times even undeservedly censured. We entirely concur with our correspondent in his commendations of the prudent tact and amenity of manners which distinguish Mr. HEDLEY's administration of the powers vested in him, and of which we have had confirmation by communications from extensive colliery owners in his district; and we deeply regret that we are unable to extend the same praise to the other gentleman mentioned by our correspondent, whose conduct and manners, it is rumoured, are adverse to the popularity of Inspection in his district, but which we trust will in future be more in harmony with that civility and kindness, united with firmness of purpose, which is essential to the success of the object sought to be obtained by the appointment of these gentlemen as Inspectors of Coal Mines.

Mr. HEDLEY's three years' experience conclusively shows that 240 coal mines may all be inspected once, and some of them three times, in a year by one inspector, which proves how very moderate were our desires when we expressed our opinion that one-half of this number ought to be examined; and if this had been done the whole of the collieries in Great Britain ought to have been inspected during the past eight years at least three times. We have enquired if this has been done, and the foregoing is the only response that has been made to our appeal.

We have carefully looked through the reports for 1857, recently issued, in the hope of finding some evidence of the incorrectness of the views we have taken on this subject, and we regret to state that we can discover nothing of the kind, whilst there is much to confirm what we have said. The whole 12 Inspectors studiously avoid giving any information as to the number of collieries inspected during the past and preceding years, and the number that remained altogether uninspected at the close of last year. Some of them digress into extraneous matters, others give us copies of special rules, which are now "as plentiful as blackberries;" and some give us their notions on education, but none of them give us that statistical information which enables us to judge of the utility and relative value of their labours. One would think that the most legitimate and natural way of commencing a report would be to say—"I have inspected (say) 100 collieries during the past year," and then add how many have been inspected during previous years, and how many remain unexamined. But, whatever difference of opinion there may be among these public officers on other questions, it is obvious there is "a strange harmonious inclination" to keep the public in the dark on this most important subject; and we trust the ensuing Session of Parliament will not be allowed to pass without an effort being made to obtain a correct return of all the collieries inspected in the several districts in each year since the passing of the first Act, in 1850.

From the reports for the year 1857 it appears that there is not only no diminution of fatal accidents, but that there is absolutely an increase. This will be readily perceived on an inspection of the following numbers of the lives lost in coal mines since 1850, as is shown in the Inspectors' reports:—

984 lives lost in 1851.	963 lives lost in 1855.
986 lives lost in 1852.	1027 lives lost in 1856.
957 lives lost in 1853.	1119 lives lost in 1857.
1045 lives lost in 1854.	7081 lives lost in seven years.

The Land Hill explosion has been urged in extenuation of this increase, but we are unable to appreciate its force. During the five years preceding 1857 the lives lost by explosions varied from 321 to 210 per annum, whilst in 1857 the number was 377, thus showing an excess of 56 over the previous maximum of loss under this head; and if we deduct this excess from the total number of lives lost in 1857, we have to deplore the violent increase of the destruction of human life in the coal mines of Great Britain.

The startling fact that 7081 men have lost their lives during the last seven years, and that this fearful evil is going on with unmitigated severity from year to year, is presumptive evidence either that the Inspection Act requires amendment, or that it is inefficiently administered. The vast importance of the subject, involving as it does the safety of the lives of 230,000 industrious and valuable men, imperiously demands public attention, and we trust our efforts to direct it into this channel will ultimately be crowned with success. We shall recur to it again.

Another unsatisfactory verdict has been given in the case of a boiler explosion. The jury was called upon to pronounce their opinion as to the cause of an explosion which recently occurred in Hyde-road, Manchester, and whereby two men lost their lives; and the only conclusion that they could arrive at was that the deceased had been killed by the explosion of the boiler, caused by over-pressure; but that how the over-pressure was occasioned there was no evidence to show. There certainly appears little doubt that the explosion was caused by the safety-valve being tampered with; but as there was no positive evidence to prove this, the casualty must be added to the list of those not satisfactorily accounted for. Mr. RICHARD ROBERTS, C.E., examined the boiler professionally, and stated that it was cylindrical, 11 ft. 7 in. long and 3 ft. 8 in. in diameter. The ends were flat and turned up for rivetting to the shell, and were strengthened by a flange 1 ft. 10 in. in diameter (inside), made of plates nearly 1 in. thick, and secured to the ends by angle iron and rivets 1 in. diameter. With one exception, all the plates he saw were rather more than 1 in. thick. The exceptional one was barely 1 in. thick. The rivets were 1 in. diameter, and 1 1/2 in. apart—a suitable proportion to the thickness of the plates. The workmanship was good, and the quality of the iron appeared to be better than the average of that of which boilers were constructed. He did not find a single badly-punched rivet hole; in fact, the boiler was so well made that for every foot of rent in the seams there were two or three feet in the solid parts of the plates. The weights projected into the Borough Jail were—34 1/2 lbs., 19 1/2 lbs., 17 1/2 lbs., 17 lbs., and 15 1/2 lbs. The safety-valve worked freely, as did the lever. The diameter of the opening in the valve seating was rather more than 2 in. The outside diameter of the valve was barely 2 1/2 in. The area of the valve was 3 1/2 in. to 1 in. This would give, if the 34 1/2 lbs. weight were used, a steam-pressure of 70 1/2 lbs. per square in. before blowing off, which, in a boiler of 3 ft. 8 in. in diameter, would give 1553 1/2 lbs. as the tensile strain to which it would be subject; whilst, according to the published data, iron of moderate quality would bear six times that pressure. He had been informed that the 34 1/2 lbs. weight which had to be worked would only require from 2 1/2 to 2 3/4 horses' power,

whilst the engine, which had an 8-in. cylinder, would, with the 34 lbs. weight, have worked up to 17 horses' power. From these circumstances, the only conclusion he could come to was that the boiler had been ruptured by excessive pressure; and he thought it highly probable that all the five weights he had referred to had been put on the lever, as they were all blown in the same direction; but he did not think an engineer, however ignorant he might be, would do such a thing himself. He could scarcely help thinking that the weights had been put on as a practical joke. Had all the five weights been on, the pressure would have been about 219 lbs. to the square inch.

We have here a prominent instance of the inadequacy of inspection alone, it being clearly shown that the boiler was in good condition, well made, and of fair quality iron, to say the least; and there is nothing to lead to the conclusion that there was carelessness, or unjustifiable economy, on the part of the owner of the boiler, yet he has to submit to the loss of the value of the boiler, in addition to that accruing from stoppage of his works. Such facts as these readily account for the manner in which the offers to insure, immediately the Steam-Boiler Assurance Company are in a position to accept risks, have been sent in. We understand that the shares have been well applied for, and that the undertaking will shortly be in full working order, when, judging from the reputation and experience of the committee, the most satisfactory results may be looked forward to. As 12 months have elapsed since the project was first taken into consideration, there has been ample time for ascertaining all the necessary particulars for the successful carrying out of the scheme; and, as the insured are to partake of the profits, should the tables of premiums be slightly in excess of the amount absolutely requisite it will be almost immaterial.

Every precaution will be taken to prevent risks being undertaken upon doubtful boilers, and the premiums will be calculated at so much per cent. on the amount assured. The society will insure boilers of every description, and also any damage arising to property from their explosion. This, however, is not the sole source from which the company will derive profit, as it is proposed to recompense the proprietor of an exploded boiler either by paying the value of it, or the sum assured when that is less than the value of it, or by erecting a new boiler in its stead; the company would thus participate, to some extent, in the profits derived by manufacturers. When the practical working details of the project were first laid down, it was estimated that the manufacturers' profits would be sufficient to cover the entire cost of management; so that the whole profits of the society as an assurance company would be available for distribution amongst the shareholders and assured. It was further calculated that in eight or ten years from the company's commencing operations 75 per cent. of steam power employed would be insured. And whilst the working of the company will, of course, be beneficial to the shareholders, it will, from the extreme caution exercised by the company's inspectors, give a feeling of security to the workpeople and the public. It will be the duty of the inspectors not only to see that all boilers assured are in proper working condition, and fitted with every necessary appliance for ensuring safety, but that the men employed about a boiler really understand, at least, the broad principle upon which to act in case of danger. As it will be to the interest of the company, in a pecuniary point of view, for the inspection to be as strict as possible, there can be little doubt that steam-boiler explosions will be reduced to the minimum.

At the GOVERNMENT SCHOOL OF MINES, on Monday, Dr. PERCY inaugurated his course by an introductory lecture on Metallurgy. After stating the derivation of the term, the lecturer observed that the knowledge of this was of great importance in many of the most useful occupations; and it might be regarded both as an art and a science. At Swansea, there were men employed in the copper works of great skill, who were able to manipulate that metal most ably, yet knew scarcely anything of the chemistry or science, but were skilled in the art. The agents in general who were employed were men of superior abilities, and in making these remarks he did not intend to allude to them. Ores, as they were well aware, were never found pure,—take, for example, copper pyrites; this brought to the smelting-works would there be subjected in a large degree by the skilful manipulators to what he might term a chemical analysis, the quartz and iron would be separated, and the copper returned comparatively pure. In the study of metallurgy, it would be necessary for them to observe the various phenomena which occurred. The knowledge of metallurgy was of great importance, and of great importance; and he believed that the old alchemists, however their doctrines in the present day might be laughed at, had done good service to chemistry.

He must, however, impress upon them that they must not suppose from what they learned there they could, after passing their examination, immediately take charge of metallurgical works; this they could only arrive at by study and experience. There was, however, one branch which they might learn practically, and that was assaying, which department Mr. SMYTH so ably conducted. Unfortunately, on the subject of metallurgy there were no books of any great importance published in the English language; in the German, there were those of KERN, WÖHLER, and RAMMELSBERG; and there was likewise a *Manual of Metallurgy*, by Mr. JOHN ARTHUR PHILLIPS, but this had hardly scope enough. There were several important papers—which from time to time he would point out to them—which they might study with great utility.

Some metals were lighter than water, such as potassium. There were likewise several non-metallic minerals, but which had a lustre similar to the metallic, and in this category he might instance graphite, silicon, and selenium. In many instances the non-metallic bodies pass into the metallic; in their physical properties they are all solid, except mercury, which is fluid. In order to arrive at a practical classification, they may be thus designated—1, as those fusible below a red heat, as lead; 2, those fusible at a temperature above redness, such as copper and gold; 3, those at the highest temperature which could be attained in our furnaces—as examples of this branch, there were wrought-iron, nickel, and cobalt; 4, those which were practically infusible in furnaces, as platinum, though this could be fused under peculiar circumstances. Some of the metals are fixed or volatilised by heat. Arsenic passes into the gaseous state previous to fusion; and some metals before they are in that condition become soft and pasty. The lecturer then described the well-known process of welding.

The specific gravity of metals averages between 0.8 and 22, and varies with the special molecular treatment the metal undergoes; this is the case with copper under different treatment, and rolling tends to increase the specific gravity. With regard to the crystallisation of metals, antimony, zinc, and bismuth exhibit very distinct conditions, according as they become crystallised; these occur from solidification by fusion, such as lead; condensation from vapour, as in the instance of arsenic; and electrolytic decomposition. Slowness of cooling tends to produce crystallisation, and this can be seen if when iron is tapped from a blast furnace it is allowed to cool slowly under a slag, a difference in the crystallisation of pig will be seen in that which has been allowed to cool slowly, and the other portion which has taken place more rapidly. If a large quantity of lead is reduced, and then stirred, a portion will be found crystallised, while the other is non-crystalline. Some of the metals are rather vitreous than crystalline, and others become crystallised after being subjected to vapour.

Some fractures are perfectly crystalline. Antimony and pig-iron have a large lamellar fracture; others ordinary, as is the case with zinc. There is likewise a granular fracture, and one which may be denominated compact; an instance of this is specular metal. The next to be considered is fibre; and if a bar of iron be subjected to the action of acid, the fibrous quality will be distinctly shown. Some metals, if melted to a certain degree, and then allowed to fall, break into columnar pieces. Malleability is the property of extending in all directions without breaking, and is opposed to brittleness. Thus, gold and silver are highly malleable; while bismuth and antimony only possess this quality in a low degree. There are various conditions which affect the malleability of metals. Copper is malleable when cold or hot; but if heated beyond a certain point it becomes so brittle that it can be reduced to powder. Zinc is most valuable when heated to a proper degree, and can then be rolled out into thin sheets; if some of these are taken and bent backwards and forwards they emit no cracking sound, nor will they break; but if heated more than necessary they become easily frangible. The lecturer then described the process of annealing. With regard to bronze, that which hardens most metals softens it. If a piece of steel be taken and cooled rapidly it becomes hard; the contrary is the case with bronze. Some alloys undergo peculiar molecular changes even when at rest. For instance, brass wire, and chandeliers composed of that metal, had been known to fall without any given cause. In order to multiply their patterns, some of the manufacturers employed for their castings an alloy of lead and tin; but, in the course of a very short period, these became so soft that they were entirely useless. Ductility is the power of traction—of drawing out without breaking. They must not confound malleability and ductility together, there being a great difference between the two, as they would perceive from the relative posi-

tion of those properties with regard to iron. In the tables which are generally put forward, the names of the metals are only mentioned, but not the physical changes they have undergone; and it is most desirable, in order to arrive at a correct judgment, that such should be stated. Tenacity denotes the strength, and this is generally tested by applying successive weights, and thus ascertaining the strain the metal will bear. Molecular changes, and the presence of foreign matters, even though in a most minute degree, have a great influence on tenacity. With regard to iron at 0°, it gave 205,405; at 100°, 191,270; and at 200°, 210,270; so that at 0° and 200° it was more than at 100°. Toughness applies to bending without breaking—such as copper; and it is used to denote the opposite to sectility, or the property of being cut. Another word which was used is softness—thus, lead is denominated a soft metal; but, in the commercial varieties, soft and hard are used in a comparative state. There are, likewise, the conductivity of heat; silver being one of the highest, marked at 100, while bismuth is lowest, being only 1.9. Those metals which are the best conductors of heat are likewise those of electricity; this varies much with the temperature, as conductivity diminishes as the temperature increases. Professor THOMPSON has lately, before the Royal Society, read some interesting papers on copper wire, referring to this property.

From the above brief résumé, it will be seen that, previous to the student at once embarking in the study of so difficult a science as metallurgy, it is the aim of the lecturer to teach him the terms which may be used, as well as to explain their meaning, illustrated as these are by specimens of the different conditions referred to. If the disciple uses his own powers of observation, and accompanies this with a diligent attention and a careful study of the various works and papers published on the subject, there can be no question but that the knowledge so acquired must render him a valuable adjunct in any of our large metallurgical works. As Dr. PERCY observed, he must not expect to go from there and take the charge of a large establishment. If he chooses, he may be well grounded in the practice of assaying, and the theory of the science. Possessed of this knowledge, he will be soon capable of learning the art. Practical experience will then teach him how best to apply the acquirements he has attained by attendance at the lectures. Several of the pupils have already distinguished themselves in India, and elsewhere. The Government School of Mines is yet comparatively in its infancy. All who have studied there are still young men; but it is not unreasonable to anticipate that, in the course of a few years, we shall hear of several of the pupils as an ornament to their profession, and an honour to the school which has educated them.

In our last Journal we referred indirectly to a pamphlet, by Mr. PIKE, "Is Mining for Metallic Ores a Desirable and Profitable Channel for Investment, or is it Not?" and we now desire to draw special attention to this little publication. It is one of those very useful and encouraging brochures which occasionally appear in different channels of commercial enterprise, and is deserving of the thanks of all who are associated with the mining industry of the country. It is, moreover, an opportune work, and its value is accordingly enhanced. It comes forth at a moment when there is such apparent desire to give energy to mining enterprise in localities which have been lying in a state of abeyance for some time, and shows that there is more than ordinary reason to calculate on remunerative returns for money embarked in such associations; so that the investor has data wherewith to calculate for himself the probabilities of the successful issue of any project. Adverse interests are always ready to decry mining altogether, but, notwithstanding all the efforts which are constantly made by such persons to divert capital from this section of our commerce, resources have never yet been wanting to support the efforts of those who have devoted themselves to the development of the mineral wealth of the country, and the statistics furnished are unanswerable evidence that this confidence has not been misplaced. Mr. PIKE's pamphlet is, therefore, in season, by furnishing such undeniable proof of the great benefit which has accrued, and will, no doubt, continue to accrue increasingly, to all who give their sanction, by support, to this indispensable portion of the business of the nation.

Mr. PIKE says, very truly, that, "like everything else with which we are acquainted, mining for metallic ores has had its infancy of charlatanry and superstition, emerging from that into a period of theory and misdirected effort, and, finally, taking rank in the dignified circles of the sciences. In order to effect this result, centuries of time, and generations of hard-working, reflective men have been absorbed; facts, collected with great personal danger and scientific enthusiasm from the remotest regions of the earth, have been carefully elaborated and generalised; kindred sciences, owing to the necessity of the position, have been called into being, and others already known wonderfully perfected, and, finally, all brought to bear on the subterranean riches of the earth, in order to constitute what is now known as the science of mining. The direction in which metalliferous veins traverse the earth is now accurately ascertained: in particular districts their angular declination is determined. The course of non-metallic veins is also known, as well as their effect on the metallic veins when in contact. The most congenial strata for the production of different descriptions of ore are accurately catalogued, and the experienced miner can judge of its proximity, or otherwise, to copper, lead, or tin by the varying stratific changes which he encounters in his progress. All the leading veins of ore yet discovered are as carefully mapped in their devious course through the country as a surface area would be delineated in civil engineering, whilst by the aid of the dial, the miner can pursue his way underground with the most unerring certainty, only to be derived from the teachings of exact science. It will thus be seen that mining is not so much a matter of chance as is very generally supposed."

After demonstrating fully and satisfactorily that mining enterprise is not more speculative in its character than any other description of occupation which British capitalists encourage, Mr. PIKE proceeds to show that the purchase and sale of ores is a most peculiar operation, and differs widely, as all our class readers know, from the usual system adopted in commercial matters; and then goes on to describe the method by which the ore passes from the producer to the smelter, which will be read with interest by the uninitiated. The writer follows on by expressing his concurrence in the truism, to which we fully respond, especially as respects mining, that "success in any speculation can only result from well-considered and effective effort, and that an all but total percentage of business failures have their origin and consummation in a breach of this very obvious commercial law, without, in many cases, the ascription of the effect to its legitimate cause." Tabular matter is appended to the pamphlet, and we recommend it to the attentive perusal of all who desire to invest in the various associations for the production of metallic ores in this country.

The enterprising promoters of steam communication between Galway and the United States have resolved to render their efforts permanent by the formation of a company, with sufficient capital and effective management. The prospectus is now issued, and the ATLANTIC ROYAL MAIL STEAM NAVIGATION COMPANY is the denomination of the association brought before the public under the direction of gentlemen of known position in London, Liverpool, and Manchester. The capital is to be 500,000, in shares of 100, each, on which a deposit of 25 per share must be made before application for shares will be considered; but more than one-third of the necessary capital has already been subscribed; it is stated, by persons practically acquainted with the advantages which must accrue to the company, and the power of the company to carry out their plans with the amount of money proposed. This is an important project in a public point of view, and one which will, no doubt, meet with ready support. The trade between the two countries, increasing as it does with such gigantic steps, requires that every available means should be used to render the voyage as constant as possible, while it is equally essential that the time occupied in the transit of goods and passengers should be brought to the shortest practicable period; and the question of safety, both as respects the merchandise interchange, and the lives of those who have to pass too and fro, is of still greater moment. This desideratum is met to a large, if not to the fullest, extent by the establishment of steam intercourse between the west coast of Ireland and the United States; it is, undoubtedly, the shortest route which can be attained, so much so indeed that it is calculated that telegrams will be little more than six days travelling from London to Washington; while, on the other hand, all the dangers of Channel navigation will be avoided, which, of itself, is a reason why the projected line should receive the co-operation of our capitalists and moneyed men. This point is one which cannot be too strongly dwelt on. All classes are doing their utmost to remove danger from seaward travellers and navigators, yet statistics show that the annual loss of lives and goods is nevertheless of enormous extent, especially in our channels. In the one which will be avoided by this new route no less than 1000 lives, and above 500 ships, are sacrificed every year, so that philanthropy alone

should lead to the establishment of all lines of intercourse which tend to decrease materially, if not to remove, the difficulties which occur to vessels navigating our seas.

The importance of the route selected by the Atlantic Royal Mail Steam Navigation Company "is highly appreciated," it is stated in the prospectus, "by the Governments on both sides of the Atlantic; and the peculiar advantages which it presents will undoubtedly secure the transmission of the mails, not only to the United States and British North America, but through the Hudson's Bay territory to Vancouver's Island and the Gold Regions on the Pacific." In this we fully concur. The respective Governments must give their support to a project of this nature, for, as we have already observed, it is one not only of class but of national interest; and although they are always slow in rendering aid to commercial enterprise, public opinion forces them in time to do what is necessary and just. It is, however, only right to mention here that the British Government has already given an earnest of their support, although a trifling one, by remitting "all harbour dues and charges for the Port of Galway upon vessels owned by this company." Altogether, the company now proposed has every element within itself to induce the public to give it full support, and the intense interest which is shown on all sides to bind the two countries together, by every practicable means, will no doubt be further evinced in respect of the Atlantic Royal Mail Steam Navigation Company.

To the perseverance and energy of Mr. JOHN ORRELL LEVER, of Manchester, is due the praise for showing the practicability of the route, and the shortness with which the passage could be accomplished with regularity, safety, and economy. The consideration to be given to this gentleman does not appear, but he is most assuredly entitled to something special,—something more than any interest he may hold like other persons by embarking capital therein.

The facilities for extending the coal and iron trades in the United States having been again brought forward, by our correspondent "Engineer," in our last Journal, and we are led to make a few remarks upon the HOPKINS MASTODON COMPANY, to which he so especially refers. The property, which has been carefully inspected and reported upon by Messrs. SAFFORD and OWEN—the former State Geologist of Tennessee, and the latter Professor of Geology in Nashville University—is on the southern margin of the great Illinois coal field, is admirably situated for drainage, and can be easily and cheaply worked. The prices that coal realises in the several markets which the company would be in a position to supply would leave an ample profit to the shareholders, and as soon as the Henderson and Nashville Railway, now in course of construction, is open, the company's coal will meet with a demand which must give most satisfactory results; whilst the consumer will have the advantage of excellent fuel, at a lower rate than at present. The advantage of possessing a property where the valuable minerals are near the surface is at all times great; and in the case of the Illinois coal field the fact of the beds being thicker and closer within a few miles of the extreme limits than in the centre add materially to the prospects of speedy and lasting success. Coal bed No. 1, where partly opened upon a little south of Madisonville, is 5 ft. thick, and it is estimated that throughout the company's property the thickness will average 6 ft. The thickness of the next bed, which is but a few feet below the first, is from 7½ to 8 ft., and incombustible matter varies from 3.4 to 4.1 per cent., so that it cannot be disputed that it is an unusually fine bed. The third bed averages 5½ ft. in thickness, and above it is a bed of canal coal of good quality; it is from 60 to 70 ft. below the last, and the quantity of ash is not greater than in the second seam. The next two seams below are not of such value, although in less productive districts they would certainly be considered rich; but there is a sixth bed, embraced in a thickness of 14 ft., which contains upwards of 11 ft. of solid coal. In Christian county, some short distance from that above alluded to, the company have a well-situated plot of mineral ground, through which a seam of excellent quality coal, from 3 to 5 ft. in thickness, runs, and may, in many instances, be actually quarried out, it being simply necessary to remove a few feet of surface to lay the coal bare.

In addition to the riches derivable from colliery operations, the company has also some workable deposits of blackband ironstone, and there is ample timber on the property to supply the wants of the mine for many years. The soil is good; there is abundance of water, and much of the surface is let in farms of about 100 acres each to yearly tenants, and is producing a good revenue, so that if a fair amount of dividends be not paid to the shareholders so soon as a reasonable time has elapsed for developing the property, it would certainly appear that the managing department had not received an ordinary amount of attention.

Although little if any actual progress towards the settlement of the dispute between the colliers and colliery proprietors has been made, the Yorkshire colliers have taken a step, which clearly shows that they are not so entirely averse to an amicable settlement as has been supposed. In the first place they publish a table of the prices actually paid in 1850, 1854, and 1858 respectively, per ton of coals wholesale, cash at the pit's mouth, and then unanimously pass a resolution for submitting the whole case to arbitration, so that it now remains with the masters to prove that the colliers' statements as to price are incorrect, in order to remove from the minds of the public the idea that the masters have been unjustly endeavouring to oppress their workmen. We subjoin the table of prices:—

Per Ton.	1850.	1854.	1858.	Advance on 1850.
Best Lofthouse	5s. 6d.	6s. 6d.	7s. 6d.	50 per cent.
Alerton Main	4 6	7 6	8 6	50 per cent.
Seconds	3 6	6 6	7 6	50 per cent.
Slack	1 0	2 6	3 0	100 per cent.

Thus from 1850 to 1854 the price of coals advanced about cent. per cent., and even after undergoing the reduction between 1854 and 1858 remain upwards of 62 per cent. above the prices of 1850, and the colliers consequently ask on what grounds the masters claim to make a reduction in the rate of wages. The masters seem to admit that wages have not been advanced more than 25 to 30 per cent., and arguing upon this admission, the men state that "the advance of 25 per cent. is about 4d. per ton to the workman, whilst the advance obtained by the masters is about 2s. 6d. per ton compared with the price of 1850." Assuming, however, that the masters are in a position to refute the arguments of the colliers, the resolution of the latter is of the fairest possible description, and if the masters have anything to justify them in the course they have adopted they cannot object to the arbitration proposed. The resolution of the men was:—

"That we are open to appoint a committee to meet our employers, in order to endeavour to bring about an honourable arrangement, and at the same time propose that the proprietors should select six, and the men six, disinterested gentlemen to take the case into arbitration, and that a reporter be permitted to attend to take notes of the proceedings; and we likewise request the Rev. Mr. Bell, the Vicar of Rothwell, and the Rev. J. H. Longston, of Seacroft, to use their influence in bringing the same about."

The colliers are receiving a fair amount of support from their fellow-workmen in the Barnsley, Durham, and Northumberland districts, and they have hopes of being enabled to keep firm to their purpose—at least, until the opinions of both parties to the dispute are fairly before the public. The "West Yorkshire Coal Owners" have issued a circular, stating:—

1. That they have only taken off one-half of the advance of 30 per cent. in wages which was given to the colliers in 1853, at a time when flour was double the price it is at present.
2. That even at the reduced rate of wages offered, an average collier can, at most collieries, earn from 4s. to 4s. 6d. for eight hours' work, clear of all deduction. This statement the masters can prove, by referring to their wage-books, if necessary; and that it is acknowledged as correct by the men is proved by the following rule, extracted from the code alluded to above, whereby the men agree to limit themselves to earning 3s. 5d. per day under the reduction, or 4s. at the former rate of wages, thereby confessing their power to earn more than that amount:—"5th Rule.—That no member of this association be allowed to work more than eight hours per day, or to earn more than 3s. 5d. per day, under the 15 per cent. reduction, and to earn 4s. per day when the 15 per cent. is obtained, and no more."
3. That the increased staff of officers rendered essential at every colliery, in order to conform to the recent enactments of Parliament, together with the late and present depressed state of trade, has added so much to the cost of production of coal, that the rate of wages offered is as liberal as can be afforded.
4. That the men at all collieries will be allowed to resume work on promising to conform to the Colliery Rules, relinquish the restrictive principle, work eight hours per day, when required, and agreeing to abandon the "Union," which has been the cause of the "strikes" which have periodically produced such misery among the mining population of England.
5. That the coalowners feel that the present struggle is not one based on the question of wages alone, but is, in fact, a struggle for the entire mastery between the employers and the employed. The spirit of dictation towards both their masters and their fellow-workmen, evinced by the colliers, is proved by the fact, that within the last few months several masters have received notices from their men, that unless certain individuals obnoxious to the "Unionist" owing to non-conformity to the above-named rules, were summarily dismissed, the whole of the men employed intended to strike; also, *vice versa*, that if such obnoxious men were taken on, the same consequences would ensue. This statement is further proved by the following rule, extracted from the code referred to:—"17th Rule.—That any member of this association who wishes to remove from one colliery to another, and who is clear on the books of his society, shall have his clearance, and produce the same to the members of the colliery to which he may remove, before he shall be allowed to descend the pit."
6. That unless the masters make a firm stand against their men's unfair demands, in

the first instance, the present state of agitation and ferment will be prolonged indefinitely. This is proved by a general of the following rule, the 8th of the published code above named, which enacts:—“8th Rule.—That each district shall have the power to sanction any strike or strikes, to the amount of 10 per cent. on the number of members in the said district, for any just and reasonable advance of wages for the labour of the miner, or to prevent any unjust reduction of the wages for the labour of the miner; but on no account shall a district sanction any strike to exceed the above amount without having the permission of the general board.”

In conclusion, the collieries deny in toto the statement of the men, that they (the men) have exhausted every means for coming to an amicable settlement of the dispute. The spirit so far shown by the men, with few exceptions, has been one of dictation to the employers, on the refusal of the latter to submit the right of the men to fix the price of coal, and to regulate other matters connected with the trade. There is no reason why miners should alone be exempted, among all other labouring classes, from being called upon to bear their due share of the occasional depression inevitable in all commercial communities. They further state, that the colliers refuse at all collieries to work for stock; the effect of this refusal will be, that the coalowners will be unable, by means of the production of the summer months, to supply the extra quantity required for the winter's consumption.

Whatever force there may be in the statement put forward by the masters, we cannot but think that the proposition of the men is so fair and reasonable, that any further opinion upon the subject should be withheld until their suggestion has received attention.

In our Supplement to this day's Journal, we publish an account of the proceedings at the annual meeting of the ROYAL CORNWALL GEOLOGICAL SOCIETY, an old and useful institution, which, it is lamentable to find, is rapidly decaying, through the apathy of the Cornishmen. Under the auspices of Dr. PARIS and Lord DE DUNSTONVILLE, the society was speedily raised to an enviable position amongst the scientific societies of the kingdom. Four years after its establishment it could boast of no less than 160 members, and amongst them some of the brightest stars which Cornwall has produced. In the present year, the number of subscribing members has dwindled down to 60, and the President is compelled to remark that there are causes enough to raise apprehensions respecting the permanent existence of the society.

The demands upon the funds of the society are small, it is true, and the papers read this year are fully as interesting as any which have hitherto been presented; but it can scarcely be hoped that without the infusion of fresh blood into the association its character can be sustained. It is not likely that the gentlemen who contributed the papers this year will be in a position to furnish equally valuable communications continually; but surely their exertions to diffuse more scientific knowledge amongst the miners, and to elevate their position, should be sufficient to create a desire in the minds of Cornishmen generally to follow in the steps of the earlier members of the society. The young men of the county should feel that men do not become DAVYS, LEMONS, and FOXES without exerting themselves, and that there are no better means of making themselves masters of the subjects, a knowledge of which is calculated to aid them in attaining a reputation which all should aspire to. We trust that it will not again be necessary to refer to want of support, and the existence of the society being in jeopardy, but that before the next meeting some PARIS or DE DUNSTONVILLE will come forward, and endeavour to elevate the institution to its former prosperity.

ON ACCIDENTS IN COLLIERIES.

On perusing the annals of the Inspectors, and of the public prints, the chief causes of death are as follows:—

- 1.—ACCIDENTS IN SHAFTS.
- 2.—EXPLOSIONS.
- 3.—FALLS OF STONE, &c.

Throughout the northern district for several years past not a single death has occurred from the breakage of ropes or chains, or from over-winding—accidents which are frequently happening in other districts, although the rate of winding is much less rapid than in the first-mentioned case; this is owing chiefly to the employment of a better class of workmen, and also that the engines are made to draw immediately from the crank-shaft, and so rapidly that the manager cannot for a moment quit the hand gear.

Several devices have come under consideration to provide for the breakage of ropes or chains, but none have been permanently adopted, because it is believed that if any such were made to depend upon, it would lead to overwinding them—in fact, no chains are used—and as soon as ever the rope shows signs of decay it is replaced by a new one. The shaft accidents, therefore, are owing to some oversight of the colliers, or to some unforeseen occurrence.

The explosions that have occurred are almost entirely owing to some want of caution of the overmen or deputies, or to the want of locked lamps, whereby the colliers have had the means of working with open lights, where they ought to have been closed. In many cases, the management of the safety-lamps is greatly deficient.

In the well-regulated collieries the lamps and oil are provided by the owners; the men are allowed to take their lamp-tops home to clean; but the bottoms are left with a keeper in a cabin for the purpose in or near the pit, which subjects the lamp to be examined and locked before delivery to the collier.

On the contrary, where the colliers buy their own lamps, they are apt to go to the cheapest market, and are unwilling to condemn the lamp when the screws, &c., fail, because of the expense of a new one; and taking the whole lamp home, they elude examination on going to their work.

In many collieries the lamps are not provided with proper locks, but the colliers are at liberty to work with them open or shut. In small collieries the proper system of examination is thought too costly, and in some of the larger collieries great carelessness in these respects prevails. Therefore, it should be an imperative rule that where lamps are necessary they ought to be locked lamps, and the managers to be held responsible for such regulation. Single bratticed shafts, too, are severely to be deprecated, especially where ventilating furnaces are employed; for, in case of the brattice getting on fire, as occurred lately at Page Bank, the lives of the people are placed in jeopardy, as well as the property.

All pits should be fitted up with guides in the shaft, and the use of chains abolished—a very useful apparatus for guarding against the falling down the shaft is the adoption of gates, to be lifted up by the cage, which fall when the cage descends, and form a complete guard to the pit; the expense is trifling, and the apparatus fast extending. Without guides in the shaft constant danger may be dreaded, and the custom ought not to be palliated. It is sheer folly to blame the ignorance of the colliers regarding the lamps; the true principle is not to trust to the discretion of the colliers, but to adopt restrictive principles, such as herein mentioned. The many lives which have been sacrificed by want of locked lamps is appalling to think of, and coroners' inquests should narrowly scrutinise the arrangements which exist previous to accidents. Instead of seeking to discover what collier set fire to the gas, direct enquiry as to the cause of the gas being there, and whether it could not have been removed under a proper system of ventilation.

Falls of stone, too, are much dependent upon watchful overmen and deputies, and not to trust to the discretion of men setting their own timber, as in the butty system. A NORTH COUNTRY VIEWER.

PROSPECTS IN THE COAL AND IRON TRADE.

We hail with much cheerfulness and satisfaction the gratifying announcement to the public, and more especially to the owners of collieries in South Wales, that the Government contract for the monthly Mail service to Australia has been awarded to the Peninsular and Oriental Steam Navigation Company, whose requirements of steam-coal (already so enormous) must in no small degree contribute to the wealth and prosperity of the coal districts of Glamorganshire. We may almost calculate on its being, at no distant period, further announced, the initiative being taken by this powerful and opulent company, to establish a similar postal service with China, and what must follow in its train, though, perhaps, gradual in its development, will be that 400,000,000 of people will be brought to participate in the advantages which we have ourselves derived from mechanical science, and which has raised the commerce of England, and especially its manufactures, to a standard to be able to supply the demands of the world. By our treaty with China, the opening wedge of civilisation has found an entrance to a vast empire, and steam and electricity will drive it home. When we reflect how recently Europe has risen to its present importance from barbarism—how slow was her march of progress until mechanical science began to be developed—how this mighty influence within the present century, only yet half expired, has revolutionised the food, the clothing, the intercourse, and the whole life and state of man, we may begin to form some idea of the effect that is to be produced within the next fifty years, and, in a great measure, in our own generation, upon 400,000,000 of people. As the facility of distribution increases in China, by the intro-

duction of mechanical appliances of civilisation, her demands upon us and our manufactures will be augmented a thousandfold, and stimulate us to greater production than we have ever before dreamed of.

We append the following extract from the Monthly Report of the eminent shipowners, Messrs. W. S. Lindsay and Co.:—

“It would appear that we cannot expect any material rise in return freights for some time to come; but as very large shipments must be made to India during the course of the next six or nine months, there can hardly fail to be a very considerable advance in outward freights. The new India Board have, we understand, resolved to prosecute the construction of railways in India with great vigour; and no less than eight railway companies will shortly be in the market requiring tonnage to a very considerable extent to Bombay, Madras, and Calcutta. Very extensive shipments of stores must also be made for the use of the great number of European troops now in India; and all these shipments, combined with the enormous increase in the consumption of coals, must ere long have a marked effect on the rates of outward freight. The annual consumption of fuel of one steam company alone, trading with the East, has increased from 300,000 tons to 300,000 tons per annum. A satisfactory peace has now been concluded with China, which, although the beneficial results to commerce will not be so sudden and so great as many are led to suppose, must ultimately create an increase in the demand for shipping; and, as the nature of that trade will require the presence of our own fleet and that of France for some time in the China seas, an increased demand for coals for their use must arise. All of these reasons, and others which we might name, when taken into consideration with the fact that the carrying trade of this country, and of the whole world, is not only steadily, but rapidly, becoming larger, while shipping, as a whole, during the last twelve months has increased to a very small extent, if at all, lead us to the conviction that shipowners have seen the worst, and that ere long there will be a considerable enquiry for their vessels.”

THE NORTHERN COLLIERIES AND THEIR EMPLOYERS.

THE PROPOSED MINING COLLEGE.

During the last week Hetton Hall was the scene of unusual festivities, and the display of good feeling existing between the colliers and their employers in that quarter forms a pleasing contrast to the unsatisfactory proceedings in other colliery districts. In our last Journal we briefly referred to the great gathering, which will doubtless be productive of lasting good to the workmen and their children, and tend to increase their affection towards their employers; we return to the subject, to make known the feeling of the men themselves with regard to the question of education. The object of the meeting was professedly to assist in laying the foundation stone of a new school in the vicinity of one of the pits belonging to the Hetton Colliery Company, but the meeting was made the medium for demonstrating the desire of the colliery proprietors to elevate the social position, and the desire of the workmen to avail themselves of whatever facilities for improvement may be offered them. Mr. T. Shield, on behalf of himself and fellow-workmen, presented an appropriate and feeling address to the proprietors, expressing their gratitude for the attention paid to their comfort, and the comfort and education of their children, by the coal owners; and the address was acknowledged in a very complimentary reply by Mr. Burrell, the chairman of the company. He “expressed, on behalf of himself and copartners, to the deputation and to the workmen in general, their heartfelt thanks for the very flattering address which they had presented to them, and for the friendly sentiments therein conveyed. He could assure them their sentiments would be cordially reciprocated on the part of the owners, and he trusted that such feelings would tend, as he did not doubt they would, to their mutual comfort, happiness, and prosperity.”

The most marked expression of feeling, however, was contained in the address to Mr. Nicholas Wood from the workmen, presented by Mr. George Cleugh, one of their number. It states that—

The special thanks of the workmen are most cordially tendered towards Mr. N. Wood, as being instrumental in laying before the Hetton Company from time to time the requirements of the various denominations, and for having performed his share to the satisfaction of all parties. For many years, and ever since he commenced in the mining business, Mr. Wood has paid the greatest attention to the comforts and interests of his workmen, as well as to the subject of education generally. His educational career commenced by the building of schools at Killingworth, where he received universal esteem and approbation; and I can testify that every grown-up individual in that neighbourhood felt for many years (and I am assured feels yet) the great good which he had rendered to them. Amongst other works of the greatest usefulness, Mr. Wood liberally and unhesitatingly built schools at Seatonburn, and at present schools are about being constructed at Black Boy; at each place the cost being solely defrayed by himself. It will be remembered, I have no doubt, by many that Mr. Wood a few years ago was intimately connected with the great George Stephenson, and that the former then wrote an excellent “Treatise on Railroads” (which has been translated into several languages), clearly indicating the advantages which would ultimately accrue to every individual concerned. We cannot yet take leave of noticing his brilliant career in the educational department; for almost every month present will be aware that, for many years, he has been earnestly and unremittingly exerting himself to secure as early as possible the establishment of a MINING COLLEGE at Newcastle, which, as the name implies, will be for the benefit and instruction of miners; for any overseer, or other such workman, would have the opportunity and great privilege of sending his son or sons thither to be educated, so as to become thoroughly acquainted with what is connected with mining. It is quite obvious to every one that such an institution would prove of great service; but few can conceive the real advantages which would ultimately result from it. As time is limited, I cannot more appropriately conclude than by saying that Mr. Wood may enjoy long life and prosperity, which is the most sincere and endeared wish of us, believe, every workman. Therefore, I shall now call upon you all to give three hearty cheers for him; now three for Mr. Lindsay Wood, for the management of this day's business; now three for Miss Wood, and then one for Mr. Cockburn, for exerting himself in the arrangements.

In reply, Mr. Wood thanked them for the expression contained in the address, and remarked that he had in the early part of his career been strongly and deeply impressed with the great benefits which he felt would arise in promoting the education of the rising generation, and subsequent observation and experience during long and extensive connections with and considerations of all the phases of colliery management, had confirmed him in the conclusion that what he then adopted was of the utmost importance to the welfare, comfort, and happiness of the colliery workmen, and they might rest assured, with such deep-rooted convictions, he would not now relax his efforts to promote such a laudable object. From this it may be anticipated that the Mining College will no longer be permitted to remain in abeyance, as it is now evident that in the North of England an educational establishment would not be opposed by the working men in the manner which has already destroyed an institution which would ultimately have been productive of as much benefit to the miners of Cornwall as the most sanguine could expect from the extension of practical and scientific knowledge.

REPORT FROM NORTHUMBERLAND AND DURHAM.

[FROM OUR CORRESPONDENT.]

OCT. 14.—We have nothing new to report respecting the Coal and Iron Trades here; the prospect generally speaking is encouraging, still many collieries are doing but little business.

A number of men have received notice lately to leave the Tyne Main Colliery, as it is intended to stop the working of one part of it. Several men have also received notice to leave the Hebburn Colliery, the working of that colliery being still much obstructed by water; they have, however, commenced to erect the large winding-engine there, which it is expected will relieve them in that respect.

The Heworth Colliery is now about full with new hands; a few of the old hands still linger about, and they have offered this week to go in at the old prices, but they will scarcely be allowed now to do so.

In referring again to the paper of Mr. Wales, read last week before the Northern Institute of Mining Engineers, we may remark, in the first place, that it is rather difficult to give a written account of those modifications in the mode of ventilating whole and pillar workings without the aid of diagrams. We would, therefore, recommend all who have the opportunity to examine those diagrams, as copies of them will be published in the Transactions of the Institute. We shall, however, make the subject as plain as possible. The first method shown of ventilating a panel where the whole workings are proceeding, and the pillars are being taken off behind, is this.—The air is carried up to the face of the working, and along the face of the whole, by means of board stoppings, and afterwards is brought through the broken workings. Now, when this is the system employed doors are placed where the coals are taken out of the broken, and any derangement of those doors causes considerable danger of the gas rising up to the face, and coming in contact with the naked lights used in the whole. The next method shown is to split the air into two columns, and conveying one column through the whole workings and the other through the broken. Here there are no doors to fear. But still presuming that any obstruction should take place in the whole air-way, a possibility exists of the gas backing up to the whole as before, and thus causing danger. The next method shown is to convey the air in one column to the whole face first, and when it reaches the extremity of the whole, it is conveyed back along the headways, or coursed headways-way until it arrives at the broken, when it is taken along the edge of the goaf as before. By this arrangement the air always presses towards the broken workings and goafs and in this case the doors are so placed at the entrance to the broken, that presuming them to be left open, the whole current of air passes to the end of the headway, on the upper side of the goaf, so that the gas is conveyed away by it, and cannot possibly go towards the whole workings, so that this plan has pe-

culiar advantages, which will be seen at once by a professional pitman. A good deal of discussion took place on the merits of those different modes of ventilation, which was very interesting, and let us hope will also prove useful. Diagrams showing other modifications were also exhibited. Perhaps the best method of all is to push the whole workings forward, so as to leave a barrier between the whole and broken workings, which gives still further security from danger of the open lights coming in contact with gas.

The inquest on the sufferers at the Page Bank Colliery was opened again yesterday, and the evidence of several gentlemen taken, including that of the viewer of the colliery, Mr. Johnson. It would appear from the evidence given that the fire had originated either from a spark from a torch used in the shaft, or a spark from the furnace at the bottom of the shaft. Whatever was the cause of the origin of the fire, it is clear that the blower of gas which existed in the shaft was the main cause of the extent of the catastrophe. It is evident that, on the whole, the shaft was a dangerous one, and it must be observed that it was tabbed with plank tabbing, and filled with brattices, so that it was almost entirely a wooden shaft. It may, we think, be reasonably doubted whether this plank tabbing is sufficient to confine such a subtle fluid as explosive gas, so as to make such a shaft safe. Metal tubing with iron pipes inserted for the conveyance of the gas to the surface would certainly have done so. Still single shaft brattices must always be objectionable. It is certainly not too much to say that all collieries ought to be provided with two distinct shafts, in order that they may be properly and safely ventilated; and we would also observe that where brattices do exist, machine ventilation would be much safer than that by the furnace, and, perhaps, quite as efficient. It will be seen by the evidence that Mr. Atkinson, the Government Inspector, visited this colliery in July last, when the viewer proposed to drive a drift for the purpose of effecting a distinct upcast, which plan was approved of by Mr. Atkinson. The inquest was again adjourned.

We perceive that our remarks respecting the Farnaces coal field has given offence to your correspondent “S. A.” He asserts that the statement we made is “partial and incorrect, and calculated to lead to erroneous conclusions.” We shall prove the contrary, however, and also point out many gross errors made by “S. A.” in his letter. Our statement was, if partial at all, two favourably coloured. He, “S. A.” begins by stating that I intimate that the coal strata are much disturbed by dislocations, and proceeds to reply, by stating that “the Farnaces Pit was sunk between the two dykes, and that those dykes were the chief obstacles met with, beyond the presence of small hitches, common to all seams of a similar position and character.” Very well, those dykes are a part of the dislocations alluded to by me. But “S. A.” is quite incorrect when he states that those are the chief obstacles met with. Those things he calls small hitches, are formidable troubles, I call nips. (I am speaking particularly now of the Brockville seam, both in Messrs. Bowe's new pit, and also to the south of the old Farnaces Pit). These nips are patches of hard stone that descend into the seam, and generally to the thill, or nearly so, and there is generally a great deal of bad coal on both sides of those nips; so that very great expense is incurred in getting through those obstructions, and the coal seam is seriously deteriorated. This seam also abounds in swellies, or small bushes; when the water is troublesome it has to be taken out in tubs. This is one of the defects of the seams here; you have scarcely any decided rise in any one direction, but the seams present those small basins. And it is a curious fact that the coal is thickest at the bottom of those basins, and thinnest at the edge of them; but the increase in the thickness of the coal is always an addition of coarse coal at the bottom of the seam, the good coal remaining about a uniform thickness throughout.

“S. A.” does not deny that frequent blowers of gas are met with, but says that the mention of them is only intended to intimidate the nervous (people of weak nerves?) The mention of them is not intended to intimidate at all, it is merely the notice of a remarkable fact connected with the locality. But, in addition to this, other faults exist, and of a serious kind, too. The company we mentioned, formerly John Bowes, Esq., explored a considerable distance to the south—not a trifling distance, as stated by “S. A.”; and with respect to this firm relinquishing the enterprise in the new pit to the north, the reason was exactly what we stated—there was a difference between the cost of working the coal and the price it was sold for on the wrong side. “S. A.” states also that it is not true that much water is met with, and gives the quantity they have at present. But we reply that this is mere sophistry. All the parties who have worked any recognised workable seam on the royalty have had to deal with considerable feeders of water; and this rule will, we doubt not, hold good. “S. A.” next states that we draw an unjust comparison between the positions of the Elswick and Farnaces Collieries. But if he refers to our remarks he will perceive that we make no comparison at all; we merely state that the former intend to work the coal in the royalty adjoining the latter (in the Redhugh estate, of course), and that they have not as yet made such progress in that direction as to enlighten us much as to the state the seams will be found in.

THE PAGE BANK COLLIERY CATASTROPHE.—After the ordinary evidence was concluded, Mr. J. J. Atkinson, the Government Inspector, was examined as to the cause of the accident. He did not think that there was any one to blame for the accident, and he considered that the general arrangements of the colliery were proper and efficient. The coroner summed up at great length, and the jury, after about an hour's consultation, returned the following verdict:—“The jury are of opinion that the brattice in the shaft was ignited by a spark, but from what cause the spark came these are no evidence to show. They are further of opinion that the whole of the men, save Kellet, died from fear and suffocation, arising from the fire in the shaft; Kellet being killed by falling down the pit; and, further, they are of opinion that no blame can be attached to any person whatever. They, therefore, give a unanimous verdict of ‘Accidental Death.’”

REPORT FROM MONMOUTHSHIRE AND SOUTH WALES.

[FROM OUR CORRESPONDENT IN SOUTH WALES.]

OCT. 14.—The Iron and Coal Trades throughout the district continue to show more activity, in Glamorganshire especially a larger demand being experienced. We hear of several good orders being in hand from America, while the continental trade seems to be reviving to some extent. In Monmouthshire business is rather more quiet, but still the works are kept going much better than for months past. Few complaints are now made of scarcity of water, and in all respects affairs have taken a decided change for the better. The enquiry for railway iron is good, and pigs meet a fair sale at the prices now generally current. The steam coal trade is rather dull, and has but little altered since our last.

The remarks recently made in the Journal relative to the large number of accidents which have lately taken place in South Wales, are fully substantiated by the report of the Government Inspector. The late Mr. H. Mackworth stated that during 1857 more of these catastrophes in miners occurred than in any of the preceding six years, with one exception. The total number of lives lost in 1857 was 85; in 1856, 65. On the other hand, Mr. Evans, Inspector for Glamorganshire, reports that although mining operations are carried on to a much larger extent in this district than formerly, fewer fatal accidents occur. At the same time the number of deaths was 94, against 224 in the preceding year. We hope that in both districts these figures will be greatly reduced, and have no doubt that both Mr. Brough and Mr. Evans will use the greatest watchfulness, in order to bring about this result.

Mr. Bruce, M.P. for Merthyr, addressed his constituents in a speech of considerable length last week. It will be remembered that at the time of the Aberdare strike this gentleman did his utmost to induce the colliers to return to their work, though, unfortunately, his efforts were unavailing. He thus alluded to the subject last week:—

The general aspect of trade is good and sound, but I am sorry to say I cannot congratulate my neighbours upon any decided improvement in their position. Certainly one subject for congratulation was the conduct of the Merthyr workmen during the trying times they had passed through. I wish I could say as much for my friends at Aberdare. I believe they saw the difficulties and dangers which threatened their employers, and were anxious to do that which was moderate. There was a large number there who would readily have acted as the men of Merthyr did, admitted that the circumstances were trying and pressing, and have accepted the reduction. They were, however, misled. They would not listen to the arguments brought forward, and a strike ensued, which, at the lowest calculation, led to a loss of 50,000. Nor did the evil rest there; not simply did they lose 50,000, crippling the resources of their masters, and preventing them laying out fresh capital, but the effect has been to divert the trade from Cardiff to other parts. It so happened that at the time the masters in the North were pressing on the public the quality of their coal, and the consequence has been that many of the largest consumers of this district left here, and have not yet returned. This is one reason why wages are at present so low. Much as I regretted the conduct of the Aberdare workmen, that of the men of Merthyr commands my unqualified approbation. They accepted a very large reduction in their wages, which must have pressed very heavily upon them, and rendered their circumstances most trying. The taking off of one-tenth of their wages must have placed them in a difficult position, and that they should have had the good sense to refrain from joining in a step calculated to increase their sufferings, said a great deal for the progress of education and knowledge throughout the country.

These observations were received with loud cheers by the large audience, and Mr. Bruce then passed on to review political matters.

Recently considerable rejoicing took place on the occasion of Mr. Jones,

of Newport, "winning" the celebrated No. 3 seam of coal under the Gellygryon estate. The mineral is of good thickness, and it is the first vein opened in the valley.

An inquest has been held at Llanelly on the body of Thomas Thomas, who was killed a few days back. The deceased was driving a horse-drawn three-wheeled cart laden with coals from the Bryn Colliery, on the St. David's Railway, to the Llanelly Docks, when in passing from one wagon to another he fell, and was killed. An inquest was held on the body of the deceased, who was killed last month in the engine-room of the Gelly Colliery.

A considerable improvement has been made in the slate quarry near Festiniog, North Wales, belonging to Mr. S. Holland. It is worked through different levels into the inside of the mountain, to the distance of more than 1000 feet. No daylight can enter these excavations, the workmen having hitherto used candles. The proprietor, however, has recently had the quarry fitted up with gas; and he states that the workmen are all greatly delighted with the change. They get through their labour now with much more ease to themselves and profit to their master than they could under the old system. We shall be surprised if the owners of other Welsh quarries do not soon follow so excellent an example.

One day last week, as a miner living at Abergwilly was working in the Vale of Towry lead mines, a slip of earth fell upon him, fracturing his leg, dislocating his shoulder, and bruising him in several parts of the body. The unfortunate man had only just recovered from injuries received in the same mine some time since.

Another accident through a fall of roofing recently occurred at Blaenau. A man named Thomas Robinson was at work in the Upper Deep Pit Cutting Mine when a large piece fell on him and inflicted serious injuries about the head and other portions of the body. He still lingers, but is not expected to recover.

At the Bristol Mining School, on Monday, Professor Tennant, F.G.S., delivered a lecture on "Mineralogy." The lecturer alluded to the loss sustained by the death of Mr. H. Mackworth, and referred to the large mineral possessions of England yet to be developed. He pointed out the use of the science of mineralogy in leading to further discoveries, and urged its study upon his hearers. After the lecture a vote of thanks was carried, and Professor Tennant, in responding, again referred to Mr. Mackworth as one of his early pupils at King's College, but latterly he became more learned than his master. It was in fulfilment of a promise made to him that he delivered the lecture that day, and it was a tribute to his memory.

On Tuesday a lad named James Butcher, in the employ of the Messrs. Bailey, was killed at the Main level, Brynmawr. The deceased ordinarily worked with his father as a collier, but on the day in question he was asked to act as a haulier, and did so. Not being accustomed to the work he was accidentally crushed to death between the loaded trams which he was bringing out of the level.

In another column a full report is given of the fearful accident in the Primrose Colliery, near Neath, by which 14 lives were lost.

The Rhymney Railway to Cardiff we learn to be a very promising line, the traffic developed from week to week giving assurance that it will vie with its ally, the Taff Vale, and that very shortly, in the amount of dividend to its shareholders. It is already in advance of the Vale of Neath line, on a comparison with the amount of capital. It was constructed for a mineral line, but by the report of the directors the coal traffic (for which the undertaking was in the main projected) up to June 30 last could not be said to exist, as the coal proprietors had not been able to mature their arrangements; yet the revenue for the three months of its first being opened for traffic, up to June 30 last, amounted to 5000*l.* and upwards, derived almost exclusively from passengers, general goods, and iron; and these, therefore, indicated but to a very limited extent the resources of the undertaking. A decided preference seems to be given to this line by passengers, and for the transit of goods to the Midland Counties and the North (being one continuous gauge), while by the South Wales line a break of gauge would have to be encountered; and the directors in their report are well justified in their belief that the passenger and general goods traffic will prove a more important source of revenue than they anticipated; and since the half-yearly meeting we learn there has been in this department of the traffic a prodigious increase, more especially in the number of passengers along the valley, as well as through passengers to Shrewsbury, Chester, Liverpool, and the North; while to the Midland Counties, Manchester, Leeds, and the adjacent manufacturing towns, the communication has become direct and easy since the opening, in September last, of the Shrewsbury and Crewe (London and North-Western) Branch Railway; and the Rhymney line is, therefore, preferred to the broad gauge from Cardiff. The most important and primary source of traffic is only about to commence—the coal trade; and if we may judge from the number of new pits opened along the line, what is in contemplation to be carried out by the Rhymney Iron and Coal Company in furtherance of the arrangement they have recently come to at the Cardiff Docks with the trustees of the Marquis of Bute, and the present prospects of the iron and coal trade, the shareholders will have reason ere long to congratulate each other upon the success of this enterprise.

THE NEW IRON DISTRICT IN SOUTH WALES.

SIR,—A few months since my attention was called by a friend to a letter in your paper respecting the valuable iron and coal mines just then discovered by a Mr. R. Plant; we were then told that iron-works, 20 blast-furnaces, and 200 puddling-furnaces, would be erected in a few months, &c. I was shooting over the said district a few days ago, and asked where the works were erected, when, to my astonishment, I was told all were standing, &c. No iron mine out of the millions of tons at surface carried to the station, as Mr. Vaughan and Messrs. Williams and Evans have done: all was standing quiet. I must say that the Lanharry Mine, let by Mr. Grouse to Mr. Plant, is the finest sight I ever saw—it is a mountain of iron; and, judging from the little hole Messrs. Williams, Evans, and Mr. Vaughan have taken their thousands of thousands of tons from, there must be millions of millions of tons there (at Lanharry); and what can be the cause of so valuable a mine standing idle? But one thing is clear—that good iron can be produced there at a less cost than at any other place in Great Britain.

I am told the coal is very fine, and free from sulphur, the ash white, and favourable for the manufacture of iron. The mill will very soon be completed to Mr. Vaughan's mine. The district is altogether very inviting.

A report of an iron mine being found on Endru-owen property, by Mr. Smith, is also abroad; but it will be well for Mr. Smith to do more than bore into it before he expends any more money on the faith of having an iron mine. He is on the coal measures, and in my opinion will not find an iron mine that will pay to work: he might find traces of iron, but not in sufficient body to pay.—Cardiff, Oct. 14.

THE IRON AND METAL TRADES OF STAFFORDSHIRE.

[FROM OUR CORRESPONDENT AT WOLVERHAMPTON.]

OCT. 14.—The quarterly meetings in connection with the Iron Trade have been held during the week, at Walsall, on Tuesday; in this town on Wednesday, and Birmingham to-day; the meeting at Stourbridge taking place to-morrow, and the concluding meeting at Dudley on Saturday. The attendance at the meetings has been about the average, a fair number of purchasers from a distance being present yesterday, and at Birmingham to-day. The general testimony is that the trade has taken a distinct turn for the better, and that future prospects are encouraging. No idea is entertained of making any advance upon present prices during the current quarter; but it is anticipated that the demand in spring will warrant a rise next quarter-day. There is no doubt much more manufactured iron is being made in this district than at the commencement of the quarter, although there are still several large works by no means busy. The great drawback upon the improvement of trade hitherto has been the absence of a large demand for the United States. It cannot be said that the demand for the quarter is yet large, but there are more orders, and those who depend largely upon that market are more hopeful. On the whole, the tone of the meetings is more cheerful; the improvement is not extensive, but it is decided, and has continued long enough to be looked upon as indicating that the period of depression is passing away, and that a brighter day is dawning upon the trade.

Pig-iron is decidedly firmer. Purchasers are very desirous of buying on terms which they refused a few weeks ago. An advance of 2*s.* 6*d.*, or nearly that, may be said to be obtained, although the purchases actually taking place are not extensive. Pig-iron may be quoted at 3*l.* 10*s.* to 3*l.* 12*s.* 6*d.* for good qualities of hot-blast pigs, 3*l.* 15*s.* having been obtained in some few cases. Inferior pigs fetch about 3*l.* 5*s.* The ironstone of the district maintains a good price, the best qualities being 14*s.* to 16*s.* per ton. The calcined ore of North Staffordshire is delivered into the district at from 15*s.* 6*d.* to 16*s.* 6*d.* for good qualities, and the red hematite of Cumberland, of which a good deal is being sold, fetches 21*s.* or 22*s.* per ton. The colliers' strike necessarily tends to keep up the price of coal. New mine and bottom coal for use at the furnaces is from 7*s.* to 8*s.*; thick coal, 10*s.* to 11*s.*; and slack, 2*s.* 6*d.* per ton.

In North Staffordshire the manufacturers are busier than in this district. The preliminary meeting of ironmasters was held last week. No altera-

tion was made in prices. The trade was reported to be improving; and it was a matter of congratulation that no reduction in wages had been necessary during the depression of the present year.

With respect to the colliers' strike in the thick coal district, it is difficult to speak with confidence, or to prophesy with any degree of safety. Several of the men have been up before the magistrates for leaving their work without giving fourteen days' notice. In most cases they have acceded to their employers' offers, to have the costs deducted from their wages, and to return to work; but in other instances they have been obstinate, and a few have been sent to prison for three months. With respect to the custom of a fortnight's notice being required to be given before a man can leave his work, or a master can discharge him, or before either party can carry out any alteration in the rate of wages, it seems impossible for there to be two opinions about its desirability. The great inconvenience to which masters are exposed by men leaving their work suddenly must be apparent, and it is equally desirable for the workmen to have notice that he is to be deprived of his employment. But the men assert, and probably not without some truth, that the compact is not observed by the masters, who discharge them without notice.

This is, however, chiefly the men's own fault, for a case is scarcely ever heard of in which a workman who is discharged insists upon this notice, and if men will not take care of their own rights they cannot possibly enjoy them. Of course, if men are discharged on account of misconduct they would not be entitled to notice, as such misconduct constitutes a forfeiture of the contract. In reference to the case, however, of a reduction of wages, the rule of giving a fortnight's notice is undoubtedly observed by the masters, and this is evidently a most desirable rule, as offering an interval for reflection and mutual consultation. I have often expressed regret that this rule should have to be enforced by imprisonment with hard labour, but it is a question whether this, as a last resort, could be wholly dispensed with. Some men, too, have been proceeded against during the week for intimidating those about to work, and have been imprisoned or fined. It appears to be certain, that whilst a large number of the men's notices for an advance west of Dudley expired on Saturday last, a large portion have gone in at their old wages, and but few of those whose notices had expired left their work. Many have also returned to work in the district in which the strike originally commenced, and the opinion prevails that the firm attitude taken by the masters at their meeting on Thursday last has had the effect of convincing the men that the struggle is hopeless. On the other hand, a number of the thin coal miners about Coseley, who had given notice for an advance of 6*d.* a day, the amount which they were reduced in the early part of the year, have been addressed during the week, at meetings of some 600 persons, by some of the leaders of the strike in the thick coal district, and resolutions were unanimously agreed to in favour of insisting upon the advance, and also condemning the butty system. This new phase of the strike is only important in relation to the continuance of the strike in the thick coal district. Possibly another week may determine the course of the struggle.

Several fatal accidents have occurred during the week from the fall of the roofs of coal and ironstone mines; this being the great source of fatality in this district, where the strata are so greatly shattered by dislocation. In two cases the unfortunate men who lost their lives had been warned by the doggies to prop the roof, which they had neglected to do. A very large proportion of these fatal accidents arise from the men's own carelessness.

REPORT FROM YORKSHIRE, DERBYSHIRE, AND LANCASHIRE.

[FROM OUR CORRESPONDENT IN CHESTERFIELD.]

OCT. 14.—The holding of the quarterly meeting this week has shown the trade to be in a more hopeful position than it was a month ago, though it was generally regarded as quiet. There is almost an entire absence of speculation at present, and probably will remain so until the close of the quarterly meetings. The orders from the Continent have been but few, and of limited extent, as are also those from America. There is less underselling, and the principal houses in these counties are well employed.

The Coal Trade is improving, and the winter trade increasing daily. The strike of colliers in Yorkshire has assumed a serious aspect, there being no less than between two and three thousand men out of work and on strike. Several meetings have been held, during the week, by the men, who have refused to submit to a reduction of 15 per cent. The men have issued a report, stating their reasons for striking work, and the different questions in dispute. On Wednesday, at a meeting of the colliers of the Leeds and Methley district, the speakers urged the men to adhere firmly to their resolution not to return to their work unless their employers abandoned the attempt to reduce their wages 15 per cent., and to compel them to sign a paper not to combine together on a future occasion. The conduct of the coalmasters was wholly condemned, and a confident opinion was expressed that if the facts were investigated the public sympathy would be with the colliers. [This subject is fully referred to in another column.] The Revs. J. Bell and J. H. Longsdon, and Mr. Lloyd Jones addressed the meeting, and recommended arbitration for the settlement of disputes.

The following resolution was unanimously adopted by the meeting:—"That we are open to appoint a committee to meet our employers, in order to endeavour to bring about an honorable and amicable arrangement; and at the same time to propose that the proprietors should select six, and the men six, disinterested gentlemen to take the case into arbitration; and that a reporter be permitted to attend to take notes of the proceedings; and we likewise request the Rev. Mr. Bell, the Vicar of Rothwell, and the Rev. J. H. Longsdon, of Scroft, to use their influence in bringing the same about."

A resolution was also agreed to urging that miners should unite for the purpose of raising funds to provide for their sick, infirm, and aged brethren, and to pension the widows of deceased colliers.

The lead mines of Derbyshire are making good progress, and at the present time several of the new mines promise to be highly remunerative. The Cowden Rake Mining Company have made a call of 5*s.* per share. The company are making good progress with their new shaft.

The yield of the Eyam Mine has not been so much of late, but the company are anticipating getting into a better work.

The Mill Town Mine, at Ashover, is improving, and the next measure is likely to be much larger than the last. The workings are looking well.

The Mill Dam Mine continues about the same as reported last week.

The New Midland Mine, at Ashover, is reported as looking better, and the manager speaks with greater confidence of its ultimate success.

A considerable improvement has taken place in North Derbyshire shares, and the proprietors seem to be more confident in the prospects of the undertaking as the engine-works progress towards completion, so as to enable the miners to recommence operations.

The Peak Forest Mine shares have been sold this week at 25*s.* prem.

OVERLAND TELEGRAPH TO NEW YORK.—The check which has been experienced in the permanent establishment of a submarine telegraphic communication between this country and the United States has occasioned the suspension of introduction, if not total abandonment, of several projects which were in course of organisation for the laying down of lines of electric wire, at other points in the United Kingdom and on the other side of the Atlantic; but while discouragement has been thus given to submerged lines, the minds of enterprising men have been at work to obviate the difficulties which the sea, for such an extreme length and of such vast depth, apparently presents, and we have reason to believe that all the necessary steps have been taken to establish an overland telegraphic communication between London and New York. This is proposed to be effected through Russia. The concession from the Government of that country has, we are assured, been obtained, and with this support, it is said, the construction of the line will be easy, and comparatively cheap. The existing wires in this country, on the Continent, and in the United States, will necessarily be made available, and the only additional lines will be those to connect the nearest point in the Russian dominions with those which exist between San Francisco, in California, and New York. At first it appears that the project is one of gigantic conception, and of almost insurmountable difficulty in construction and maintenance; but when it is borne in mind the extent to which electric agency has been established on both sides, there does not seem to be any real obstacle in the way of the accomplishment of an object fraught with so much use and advantage to all the countries identified, and which, in fact, would be the whole continent of Europe, in addition to Great Britain and the whole of the United States. There is certainly nothing that the energy and perseverance of Englishmen cannot overcome, if there be good faith and liberality on the part of those territories, over which the wires must pass, in this grand scheme to connect the New and the Old World by overland telegraphic intercourse. The failure of one plan often leads to the successful establishment of another; but we trust this will not be wholly the case in respect to telegraphic communication between England

and America. We sincerely hope that it will not prove a failure in the effort to establish a submarine telegraph; but that the submarine and the overland will be equally successful. One will not clash with the other, and both may be worked to mutual advantage; for the laying down of an overland line will render further submarine intercourse quite superfluous, by providing a second means of intercourse which the proposed competing submerged undertakings had for object. The prospectus, we are told, will be shortly ready for issue, and will show, we are assured, that the enterprise has the support of gentlemen of high commercial status, as well as of those experienced as electricians. It is clear that we shall not be long without electric communication with almost all the known parts of the world. If the Atlantic submarine line be established, space, it will be proved, will be no barrier to intercourse, and the enterprise and wealth of Englishmen will do the rest.

GOVERNMENT SCHOOL OF MINES.

On Wednesday, the lecture by Dr. PERCY was on the "Properties of Metals," being a continuation of the introductory discourse previously delivered. He would now come to the colour and lustre of metals. The principal of these was white, as silver; the next was a silvery-white, then blue and grey, as was the case with arsenic; a greyish-white to blue, as lead and zinc. Others had a yellowish-white hue, with a reddish tinge; and there were some metals which were essentially grey—among these he might mention that which was so well-known under the denomination of grey pig-iron; then they had yellow, such as gold and brass; red was the characteristic hue of copper; and there was an alloy of antimony which possessed a splendid tint of violet, this was called by the old alchemists regulus of Venus, which denomination he presumed had been given to it from its surpassing beauty. They would now come to the chemical properties of metals, and more especially refer to the action of oxygen, as all metals more or less combine, directly or indirectly, with oxygen. The combination of a metal with oxygen is a true combination, whether this takes place rapidly or slowly. In this course of the lectures it was his intention to give them a great many illustrations than he had hitherto done; and as these would require a great quantity of gas, they would be shown in the adjoining room, at the conclusion of the lecture, that the activity of combination depends greatly upon the division of the metal. He had himself seen iron which had been exposed for some years to the influence of dry oxygen remain without rusting; one chemist has made the same observation with regard to potassium, but this he doubted. The metallic oxides, in relation to colour, present a variety of hues; thus, arsenic is white, bismuth a pale yellow, mercury red, cerium reddish-brown, the oxide of nickel presents a greyish-green tint, while that of chromium gives a pure green. There were several others that he could mention, but the samples of them were on the table, and they could see at a glance the various colours which the oxides of the different metals produced. Generally the compounds of metals and oxides do not possess a metallic lustre; this, however, is not always the case, as they would observe with regard to specular iron. Several of the oxides are very infusible, such as oxide of zinc, while others are very fusible; and, as an instance of this, he might cite oxide of lead, which can be volatilised after fusion, whereas others, such as oxide of iron, cannot be reduced. The process called reduction is divided into several heads, and the means employed is called the reducing agent. When this takes place by heat it is called reduction *per se*, and those metals which are reduced in this way are called noble metals, such as gold and silver, and even mercury. The term reduction is applied to their separation from sulphur and chlorine. Those which are not reduced alone have received the name of base metals; this, however, he must inform them is merely a conventional term. A reduction is said to be partial or complete, according as the metal is partially or completely reduced. The metals differ much in their behaviour to the oxygen, according to their affinities. Dr. Percy here cited several examples of the various affinities, and their distinguishing characteristics. Certain metals, such as tin and tungsten, decompose in the presence of an alkali; platinum decomposes water at a high temperature. He would now refer to the modes of effecting the combination of metals and oxygen. These were performed in the dry way without liquids, and in the wet way with liquids. There was heating by access of air; and if they placed a bar of copper in a fire they would afterwards perceive on it black scales, which were a dioxide of copper. They had all seen the melting of lead in a common ladle, which produced protoxide of lead; and if this were reduced at a higher heat it would be minium. In subsequent lectures he should allude to the process of reduction of the oxides on a large scale. Zinc takes fire; the oxide of zinc was used in pottery, and now well-known as a pigment. The oxides were formerly called calces, from being reduced to a calcium, and the process by which this is effected is called calcination. Oxides are formed by heating in contact with bodies which contain oxygen. Nitrate and chloride of potash are two powerful reducing agents; and nitre is used in assaying, for the purpose of effecting oxidation. In the wet way, if nitric acid is poured over tin, stannic acid will be produced. They had, however, now to consider the reduction of metallic oxides by the dry way. The first was heating *per se*. If they took an oxide of silver, the oxide would be evolved while the metallic silver would remain. Heating by hydrogen was a most powerful reducing agent, and not unfrequently used in the laboratory; and the probability is that its assistance may be evoked for more extended purposes. There is nothing of greater importance than the reduction by carbon, and this is pre-eminently of value to the practical and scientific metallurgist; doubts have been expressed if the reduction could take place with solid carbon, with the presence of carbonic oxide. When the oxides are easily reduced, as copper and lead, the carbonic acid is always evolved; but when the oxide is difficult as in zinc, then it is carbonic oxide, because the reduction can only take place at a temperature at which carbon reduces carbonic oxide to the state of carbonic oxide. He would next refer to heating by carbonic oxide; this was used in gas stoves, which at a future period he would more particularly refer to. The reduction of a metallic oxide in a crucible by carbonic oxide may be easily effected without coming in contact with the metal, as the carbonic oxide from the fuel would permeate through the porous substance of the crucible. Great attention has lately been given to gas furnaces, these are to generate carbonic oxide, and there is the reduction of a metallic oxide in contact with another metal, which has a greater affinity for oxygen. Cyanogen and potassium are extremely powerful reducing agents; its component parts are carbon, nitrogen, and potassium. He would now come to the wet way. One of these was the common lead tree; they then had reduction by electrolytic action, so largely used in electrotyping, as well as the reduction of gold; the sulphides also play an important part, and he had adopted the term sulphide instead of the old word sulphuret. Sulphides are solid and brittle, as lead, iron, and copper pyrites; some are more or less malleable, as sulphide of molybdenum, and sulphide of silver is to a certain degree malleable. The specific gravity is much less than that of other metals, with the exception of potassium. Some have a metallic lustre and distinct crystallisation, are inodorous, but evolve a smell of sulphur when heated sufficiently. They possess a great variety of colour—black, brown, and white of several shades. When the sulphides and oxides combine together they are called oxy-sulphides. The sulphides are either fusible, as lead, or infusible, as zinc. The various conditions of the sulphides and oxides under metallurgical treatment would be discussed when they came to the consideration of the utilisation of the various metals.

THE CYFFING COLLIERY, YSTATYFERA, NEAR SWANSEA.—It will be recollected that an explosion took place in this colliery about the middle of August last, by which six men were killed. In his evidence at the inquest, Mr. Evans, Her Majesty's Inspector for the district, stated that the accident arose in consequence of defective ventilation, and is reported to have severely condemned the ventilation and general management of the colliery. Since that period the owners have engaged the services of Mr. Thomas Shipley, an experienced and highly competent overman, well versed in the most improved modes of ventilation. Under his direction new airways have been driven and an efficient furnace has been constructed. The air has been judiciously split, and increased from 1600 to 20,000 cubic feet per minute, and thus rendered one of the most dangerous collieries one of the safest in the district, and that, too, at a comparatively small cost. Had this mine, with its defective ventilation and management, been inspected before instead of after the accident, the occurrence of the explosion would most probably have been prevented.

TO COLLIERY OWNERS AND MANAGERS.—IMPORTANCE OF WORKING COAL MINES WITH GOOD SAFETY-LAMPS.—About a year ago we called attention to an outbreak of gas that occurred at the Oaks Colliery, and stated the opinion of the viewer that if naked lights had been used, or if the safety-lamps had been out of order, or the return air had passed over the furnace, an explosion must have ensued. We have now to record a similar event, which took place at the Lund Hill Colliery, a few days ago. About the middle of the morning of September 28, a fall of roof in one of the "following-up banks," on the south side of the pit, occasioned the issue of a quantity of gas, so large as to render the air in that district explosive for five hours. The fall might have occurred during working hours, when the presence of a naked light must have occasioned a terrific explosion, and it is more than probable that if the gas had not passed into the upcast-shaft through the "dumb drift," it would have ignited at the furnace. These large quantities of gas evolved, in one case from the roof, in the other from the floor of the coal, show most forcibly the risk to human life that must be incurred in permitting the return air from a fiery mine to come in contact with naked lights of any description. We understand that Stephenson's lamps are exclusively used at this colliery; they possess a considerable advantage over the Davy, as they are extinguished by a large quantity of explosive gas, so that it is impossible the gauge can become red hot, which will happen with the Davy lamp, and serious accidents are known to have occurred in consequence of the lamp having become too hot to hold, and the man using it having dropped it, or thrown it down, the flame has passed through the heated gauze, and an explosion ensued. It may not be generally known that, although the wick of a Davy lamp be drawn down within the tube, whilst the lamp is full of gas in a state of ignition, yet frequently the flame is not extinguished, the gas continuing to burn for some time, and increasing the heat of the gauze.—*Barnsley Times.*

NEGLECT OF COLLIERY REGULATIONS.—On Monday, at the Town Hall, Little Bolton, Mr. Joseph Jackson, colliery surveyor and manager to Mr. James Hardcastle, of Firwood, was summoned by Mr. Dickinson, Government Inspector for the district, for neglecting to comply with the clauses 18 and 19 Victoria, which requires that in the event of any fatal accident in a coal mine the proprietor or manager shall forward a report of the same to the Home Secretary, and another to the Inspector of the district. On Sept. 17 a man was killed in the Roadside Pit, Brightmet, belonging to Mr. Hardcastle, and no report reached either the Home-office or Mr. Dickinson, the Inspector. Mr. Jackson, in his defence, stated that he was from home at the time, and Mr. Hardcastle explained, that being confined to the house when the accident occurred, a clerk from the works informed him of what had taken place. He at once directed the clerk to return to the pit, and request the underlooker to do all that the law required, and to assist him if necessary. These directions were given, and it did not appear to him to be proved that the reports were not sent.—Mr. Richardson, who appeared for Mr. Dickinson, said that if the reports were sent it was for Mr. Jackson to prove the fact, which would be a sufficient answer to the charge.—The magistrate indicted a penalty of 10*l.* and costs; and, by direction of the Secretary of State, the whole penalty was ordered to be given to the widow of the man who was killed, she being left with six children.—*Manchester Guardian.*

SILVER AND SILVER-PLATED ARTICLES.—The readiest mode of cleaning these articles is to wipe them over with a weak solution of liquid ammonia. This readily removes the sulphide, and no rubbing, or scarcely any, is required. The same agent will be found useful in cleaning gold chains and jewellery.

WALLASEY LOCAL BOARD OF HEALTH.
WATER WORKS—CONTRACT NO. 1.
 SUPPLYING THE LOCAL BOARD OF Health for the district of Wallasey, in the county of Chester, with about ONE THOUSAND TONS OF CAST-IRON PIPES AND OTHER CASTINGS, may obtain, at the office of the said Local Board, or at the office of T. K. Hassall, solicitor, 9, Old Churchyard, Liverpool, a copy of the specification, schedule, bill of quantities, and form of tender, upon the payment of £1 sterling, on and after the 15th inst.

Any information required may be obtained from James T. Lea, surveyor to the Board, or at the offices of Robert Harrison, C.E., 34, Parliament-street, Westminster. Tenders must be sealed and delivered to the Public Offices, Egremont, near Birkenhead (law clerk's office), on or before the 25th day of October inst., addressed to the Chairman of the Works and Health Committee, endorsed "Tender for Cast-iron Pipes, &c."—Egremont, October 9, 1858. T. K. HASSALL, Clerk to the Local Board.

STEAM BOILER ASSURANCE COMPANY.
 Provisionally registered, pursuant to 7 and 8 Vic., c. 110.
 Capital £100,000, in 10,000 shares of £10 each. Deposit 10s. per share.
 The total intended call is £2 per share—viz., £1 on allotment, and the further £1, if required, within twelve months.

And the liability of the shareholders will be limited by the policies.

PATRON.
 The Most Noble the MARQUESS OF HARTINGTON.

JAMES ASPINALL TURNER, Esq., M.P.

TRUSTEES.

THOMAS BAZLEY, Esq., Manchester.

W. CUNLIFFE BROOKS, Esq., Banker, Manchester.

Provisional Directors.

(Selected from the general committee of management.)

BENJAMIN FOTHERGILL, Esq., C.E., Manchester.

J. CLARKSON KAY, Esq., Phoenix Foundry, Birney, Lancashire.

WILLIAM McNAUGHT, Esq., Engineer, &c., Union Works, Rochdale.

RICHARD ROBERTS, Esq., C.E., Manchester.

(With power to add to their number.)

BANKERS—Messrs. Cunliffe, Brooks, & Co., Manchester.

Solicitors—Messrs. Sale, Worthington, and Shipman, Manchester.

BROKERS—F. A. Frymer, Esq., Queen's Chambers, Manchester.

PROFESSIONAL ACCOUNTANTS—Messrs. Child, Fitzgerald, and Taylor, King-street, Manchester.

AUDITORS—C. H. Minchin, Esq., King-street, Manchester, Public Accountant; Cornelius Walford, Jun., Esq., F.S.A., F.R.S., &c., 7, Bank-buildings, Lothbury, London.

SECRETARIES—Messrs. Hannam and Cox.

TEMPORARY OFFICES.—29, CORPORATION-STREET, MANCHESTER.

This company has been established to extend the benefits of insurance operations, and to meet a recognised want of an important section of the community. Although there have existed for two or three years local societies in Manchester and Salford working ostensibly for the "prevention of steam-boiler explosions," it has long been felt that inspection without responsibility is a grave mistake, which the formation of this society will necessarily correct, whilst the extended area of operation will enable it to include the cost of insurance, with efficient inspection, in a rate scarcely exceeding the present charge for the latter only.

The provisional directors in issuing this share prospectus, beg to point out that few joint-stock companies contain within them so many elements of financial success. An insurance company of this kind not being liable to epidemics as in life, or to accumulation and proximity of risks as in fire insurance, with the additional advantage of such a supervision of risks as will tend to render them almost nominal, must necessarily pay its proprietors well, assuming their tables of rates to be calculated correctly, and a fair average of business being obtained. On the first point, it is very satisfactory to state that the calculations of their actuaries, deduced from the statistics collected by him, and worked out on the theory of probabilities, and those separately made by one of the first practical engineers of the day, who has had peculiar facilities for noting their occurrences, differed only about 2s. per cent.; and on the second point, that owing to one or two scientific journals having noticed the formation of this society, they are already inundated with offers to assure the moment they are prepared to issue policies.

Under these circumstances, the directors feel warranted in expressing their conviction that an investment in the societies' shares must prove increasingly remunerative, and will eventually obtain a value equal to that of any other joint-stock company. About 1000 of the shares have already been subscribed for, and the public are now invited, for a limited period, to make application to the broker or secretaries, from whom prospectuses, containing fuller particulars of the constitution of the company, working arrangements, &c., can at the same time be obtained.

FORM OF APPLICATION FOR SHARES.

To the Provisional Directors of the Steam Boiler Assurance Company.

GENTLEMEN,—I request you will allot me shares in the Steam Boiler Assurance Company, and I hereby agree to the same, to be taken on the basis of the prospectus to me. I enclose the required deposit of 10s. per share thereon, and agree to pay the balance of 10s. per share on allotment, and to sign the Deed of Settlement when called upon to do so.

Name in full

Residence

Profession or occupation

Signature

Date

PROSPECTUS OF

THE BRINSLEY HALL COLLIERY COMPANY (LIMITED).
 Completely registered.
 Capital £25,000 (with power to raise to £50,000), in 2500 shares of £10 each.
 Deposit, £2 10s. per share.

PROVISIONAL DIRECTORS.

THOMAS PERRY, Esq., Highfields Iron-Works, near Bilston, Staffordshire.

THOMAS JOSEPH PERRY, Esq., Highfields Iron-Works, near Bilston, Staffordshire.

JOHN BOULNOIS, Esq., Charlotte-street, Fitzroy-square, London.

BANKERS—The Derby and Derbyshire Banking Company, Derby.

ENGINEERS—Messrs. Alexander and Lindow, 21, Tokenhouse-yard, London.

SOLICITOR—Mr. Joseph Storer, 2, Rotten-row, Derby.

STANDING COUNCIL—Thomas Bell, Esq., 3, King's Bench Walk, Temple, London.

SECRETARY AND MANAGER—Mr. John Shaw, College-place, Derby.

TEMPORARY OFFICE.—No. 2, COLLEGE-PLACE, DERBY.

This company is formed for the purpose of working and getting coal or other minerals. The locality in which the business is to be carried on is the Brinsley estate, in the parish of Gresley, in the county of Nottingham, which is well situated in the farmed valley of the Erewash, and lies contiguous to, and has a communication by means of branch lines already made with the Erewash Valley Railway and the Cromford Canal. The situation is most convenient for bringing the minerals into the market, both by rail and canal. The vend by rail is almost unlimited, the Erewash Valley branch being in immediate connection with the main trunk lines of the Midland and Great Northern Railways.

There are also in close neighbourhood several large iron-works, the number and extent of which are nearly increasing. The estate comprises about 400 acres, and is held under leases from the Earl of Mexborough; the trustees of Mr. James Christopher Royston and Mr. Christopher Royston. The terms of the respective leases are fair and reasonable, and the reserved and minimum rents are low.

The beds of coal and other minerals have been fully proved, and are considered to be of a more than ordinary valuable character, being without faults, and with little or no water to contend with. The mines lie at a convenient depth, and may be easily worked; and the coal is of superior quality, both for home and foreign consumption, and has been partly sunk, and in a very short time, with a little further outlay, the upper beds of coal may be got, and the business carried on with a profit.

One of the most eminent firms of mining engineers in the Midland Counties have (without reference to the proposed association) fully examined and reported upon the undertaking, and their report is of the most satisfactory character. The capital is to be £25,000, divided into 2500 shares of £10 each, upon which a deposit of £2 10s. per share shall be paid on the acceptance of the letters of allotment. Power will be taken to increase the capital to £50,000, with the assent of two-thirds in number and value of the proprietors specially convened.

The company is constituted within the provisions of the Limited Liability Acts. As a commercial speculation, it is computed that if the undertaking be carried out on a scale at all commensurate with the value and extent of the minerals in lease, a large profit will be realised upon the capital employed. It is calculated that the works will be completed, and the mines fully developed, in two years from the commencement. The calls in respect of the shares will extend over that period at convenient intervals.

Each application for shares must be accompanied by a payment to the bankers of the company of £1 per share on the number of shares applied for, and for which a voucher will be given. Should no allotment be made to the applicant, the money thus lodged with the bankers will be returned free of charge; if an allotment be made, it will be applied towards the deposit of £2 10s. per share then payable.

The present directors only hold office provisionally, and at the first general meeting an election of directors will be made. The qualification for the office of director will be the holding of 50 shares. Applications for shares to be addressed to the provisional directors, at the temporary offices of the company, No. 2, College-place, Derby, in the accompanying form.

To the Provisional Directors of the Brinsley Hall Colliery Company (Limited). GENTLEMEN,—Having paid into the hands of the Derby and Derbyshire Banking Company, the bankers named in your prospectus, £1 to your credit, I request you will allot me shares of £10 each in the above-named company, and I hereby agree to accept such shares, or any less number that may be allotted to me, and to pay the calls thereon at the appointed times, and to execute the necessary deeds when required to do so. I am, Gentlemen, your obedient servant,

Residence (in full)

Place of business (if any)

Name (in full)

Profession or occupation

Date

WEST END MINE AND QUARRY OFFICES, 10, REGENT STREET, S.W.

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MESSRS. BRUNTON AND CO., ENGINEERS AND MINERAL

STEVENS, undertake the MANAGEMENT and WORKING OF MINES,

QUARRIES, &c., and CONDUCT THE LONDON AGENCY of all MINERAL PROPERTIES

in their offices with system, economy, and regularity.

Messrs. Brunton and Co. beg to inform proprietors of mines, &c., that the business of these properties is carried on in their office upon the following principles, viz.:

Accounts systematically and closely made up.

Statements in detail, and clear summaries of finance and expenditure.

Entire and impartial openness of books, reports, and documents, to all shareholders, for personal or extract.

Immediate communication of any important occurrence to the shareholders.

MINERAL PROPERTIES SURVEYED, and ESTIMATES OF MACHINERY, PLANT, and COSTS OF WORKING FURNISHED.

UNITED STATES OF AMERICA.—DUPEE, BECK, and SAYLES, BOSTON, MASSACHUSETTS, BROKERS for the PURCHASE and SALE OF STATE, CITY, and RAILROAD SECURITIES, MANUFACTURING, and BANK SHARES, give particular attention to the MINING COMPANIES OF LAKE SUPERIOR, and furnish reliable information concerning them.

(Gives, Beck, and Sayles refer to the Editor of the Mining Journal.)

TO IRONMASTERS.—The ADVERTISER, who has had many years' practical experience, seeks an ENGAGEMENT as FORGE and MILL MANAGER. He is thoroughly conversant with the several processes required in making coke and charcoal iron, sheet-iron and boiler-plates, Canada plates and tin-plates, as well as with the manufacture of bars and rails. Would have no objection to go abroad. Highly respectable reference as to ability and character will be given.—Apply to D. Davis, bookseller, Aberystwyth.

TO IRONMASTERS.—WANTED, a SITUATION, by a PRACTICAL MAN, as a BLAST FURNACE MANAGER. He has had upwards of 20 years' experience in the management of all the requisite branches of smelting argillaceous, calcareous, carbonaceous, hematite, and siliceous ironstone with raw coal and coke, to foundry and forge pig-iron, with hot and cold blast, and would also undertake to superintend the erection of blast furnaces and all machinery and appurtenances connected, also supply plants of the same, if required, on the most improved principle that is yet discovered, capable to turn out from 200 to 300 tons and upwards of pig-iron weekly from one furnace. Would have no objection to go abroad. Unexceptional testimonials can be produced.—Apply to "B. C.," Mining Journal office, 26, Fleet-street, London, E.C.

NORTH RHINE COPPER MINING COMPANY OF SOUTH AUSTRALIA (LIMITED).—NOTICE IS HEREBY GIVEN, that the CERTIFICATES OF SHARES in this company will be READY to be EXCHANGED for the bankers' receipts of 10s. per share on and after THURSDAY next, Oct. 21, 1858. London, October 14, 1858. T. HANCOCK, Manager.

TO ALKALI AND SULPHURIC ACID MANUFACTURERS.—The ADVERTISER has had the sole management of a large manufactory for several years, and is competent to PLAN, ERECT, or MANAGE a similar concern of any magnitude, and on the most improved principles, is OPEN to TREAT with manufacturers having works at present in operation, or capitalists about to erect the same, in any part of England or abroad. Highly respectable references as to ability and character will be given.—Communications may be addressed to "X. Y.," care of Mr. Jas. Newton Warburton, 30, Cumberland-row, Newcastle-on-Tyne.

TO MINE PROPRIETORS.—TO LET, the CEFN GWYN MINE, in the neighbourhood of Aberystwyth. A 30 ft. water-wheel, with a pair of first-rate crushers and pumps, now on the mine and in excellent repair, may be procured from the late lessees, for cash or shares, or partly in either mode.—For particulars, apply to the Rev. Lewis GILBERTSON, Jesus College, Oxford.

A PARTNER WANTED, in a PROFITABLE COLLIERY recently opened, and in FULL WORK, to take an active part in the commercial department, and to advance £1000 or £2000, as may be agreed on.

TO BE SOLD, OR LET ON LEASE, FOUR VALUABLE COAL FIELDS, on the celebrated Colford High Delf Vein, in the Forest of Dean, Gloucestershire.

TO BE SOLD, OR LET ON LEASE, the valuable MINERALS of ANTHRACITE COAL and IRONSTONE in the ESTATE of BLAEN GARNANT, near Bettws, Carmarthen. This property adjoins the Llanelly and Llandilo Railway, which communicates with the shipping port of Llanelly.

NUMEROUS VEINS OF IRONSTONE of superior quality, known as the RHAS VACH and other carbonate veins of the lower measures in the South Wales coal basin, situated near Pontteberne, in the Gwendraeth Valley, Carmarthenshire.

A land-sale ANTHRACITE COLLIERY, near Lanon, Carmarthen.

AN EXTENSIVE COAL FIELD, near Llanelly, Glamorgan.

Apply to Mr. JOSHUA RICHARDSON, C.E., Neath, South Wales.

TIN MINE IN FULL WORKING, ON THE EASTERN BOUNDARY OF CORNWALL.—FOR SALE, the WHOLE, or a MOIETY thereof, to respectable capitalists. The steam-engine, with two boilers, answer all the purposes of drawing and stamping the tin-stuff. The mine has made regular returns, and is in complete working order, with ample plant for many years to come. The present proprietors are few. Arrangements might be made to continue the mine under limited liability. Plans, specimens of the ore, tin-bills showing the quantity thereof, and other particulars, can be furnished.—Address, "S. S. S.," Mining Journal office, 26, Fleet-street, London, E.C.

MINING MACHINERY FOR SALE.—FOR SALE, BY PRIVATE CONTRACT, a 24 in. STAMPING ENGINE, with boiler about 10 tons, fly-wheel, sweep rail, axle, 16 heads of stamps, frames, lifters, &c.—For particulars, apply to Captain OSMON, Wharfedale Iron Works, Goldsmithy, near Marazion, Cornwall; or to Mr. JOHN WATSON, 13, George-yard, Lombard-street, London, E.C.

FOR SALE, BY PRIVATE CONTRACT, WHEEL KENEGGY MINE and MATERIALS, consisting of a 24 in. cylinder ENGINE, 9 ft. stroke in 8 ft. out, with a 9 tons boiler complete, with 4 in., 7 in., and 8 in. pitwork, main rods, pump rods, ladders, horse wheel, chain, kibbles, smiths' bellows, vice, anvil, and tools, miners' tools, wood sheds, dressing house, and account-house furniture, as they now stand.—For particulars, and price, apply to Captain WHITE, or Mr. R. E. MICHELL, Marazion, on or before the 25th inst. Marazion, October 11, 1858.

FOR SALE, OR HIRE, TWO 12-in. WINDING AND PUMPING ENGINES, ONE 9-in. PUMPING ENGINE, on strong wood frames for portability. BOILER with fittings, 4 tons (nearly new). Also, a 20 fms. 7-in. DRAWING LIFT complete, at 6s. 3d. per cwt.—Apply to J. S. PHILLIPS, Engineer, &c., Marazion.

FOR SALE, a 24 in. WHIM HORIZONTAL ENGINE, with a 10 tons boiler, nearly new, in excellent condition, and drawing machine attached. As this engine is very superior in make and condition, parties requiring one will do well to examine it.—Apply to Mr. C. WESCOCK, 21, Southemby, Exeter.

TO IRONMASTERS.—The WHOLE, or PART, of a very good MAGNETIC IRON MINE FOR SALE, on the north coast of Cornwall.—Apply to Mr. CHAS. PENNOCK, 41, Clifton-place, Plymouth.

N.B.—A large quantity of MAGNETIC IRON ORE FOR SALE, delivered at Gloucester or Wales, at a moderate price.

SOUTH BOG MINING AND SMELTING COMPANY (LIMITED). VOLUNTARY WINDING-UP. SALE OF THE MACHINERY, PLANT, &c.—The LIQUIDATOR appointed to wind-up the affairs of the above company hereby INVITES TENDERS for the PURCHASE OF THE PROPERTY of the above-named company now UPON THE MINE, situated near Ministerly, Salop, in One Lot. Full particulars may be had, on and after Monday, the 18th inst., upon application to this address, or to the captain on the mine, who will show the things. Tenders will not be received after the 28th inst. 10, New-street, Bishopsgate-street, London, N.E. G. PERCEY, Liquidator.

RIBDEN MINING COMPANY (LIMITED). NOTICE IS HEREBY GIVEN, that an EXTRAORDINARY GENERAL MEETING of the shareholders in this company will be HELD at the White Hart Hotel, Uxeter, Staffordshire, on WEDNESDAY, the 27th October inst., at Twelve o'clock at noon (when it will be proposed to adjourn the commencement of business till Two o'clock), for the purpose of confirming the special resolution passed at a meeting of the shareholders, held at the Shrewsbury Arms, Farley, on the 31st of August last, adopting the Articles of Association then read, and for other general or special business. By order of the Board of Directors, J. DICKINSON BRUNTON, Sec. 10, Regent-street, London, S.W., October 13, 1858.

THE WEST PARK CONSOLS COPPER AND TIN MINING COMPANY.—NOTICE IS HEREBY GIVEN, that a GENERAL MEETING of the shareholders in this company will be HELD at the office, 117, Bishopsgate-street Within, London, on TUESDAY, the 26th day of October inst., at One o'clock precisely. At the conclusion of the general business the meeting will be made special, for the purpose of disposing of certain shares that have been forfeited to the company. By order of the Committee, J. H. MURCHISON, Sec. and Pursuer. 117, Bishopsgate-street, October 14, 1858.

PATENT DERRICK COMPANY (LIMITED). OFFICES.—27, CORNHILL, LONDON. Capital £100,000, in 2000 shares of £50 each.

DIRECTORS. W. E. DURANT CUMMING, Esq., Lloyd's. THOMAS MOXON, Esq., 29, Throgmorton-street. JOSEPH R. CROSKY, Esq., 34, King William-street, City. Capt. M. J. CURRIE, R.N., Vernon-terrace, Brighton. WILLIAM BARTER, Esq., 12, Langbourne Chambers, Fenchurch-street. LEWIS HOPE, Esq., 4, Bishopsgate Churchyard. Capt. JAMES RAWSTORNE, R.N., Abingdon Villas, Kensington. ALBERT D. BISHOP, Esq., 9, South-crescent, Bedford-square. SOLICITOR—Charles Walton, Esq., 30, Bucklebury. BANKERS—London and Westminster Bank, Lothbury, London.

This company's derricks are eminently adapted, by their great power, to accomplishing expeditiously and economically every description of hoist, whether on land or water, required in Government arsenals and navy-yards, or by dock companies, shipbuilders, engineers, contractors, and others; also to raising sunken and recovering stranded vessels and their cargoes.

A large proportion of the vessels wrecked on our coasts may be recovered by the aid of the patent floating derricks, at a guaranteed rate of salvage, ranging between 25 and 75 per cent. The company have entered into an agreement with the marine insurance companies, and underwriters of London and Liverpool, which secures to the former 75 per cent. of the net salvage proceeds (after deducting working expenses) from all vessels and cargoes, sunk prior to the date of the agreement, which may be raised and recovered by means of the patent floating derricks.

In the United States two of these derricks, belonging to the New York Derrick Company, have raised and saved upwards of 400 sunken and stranded vessels, and have likewise hoisted and placed on board the engines and boilers of more than 300 steamers. This company commenced by paying its shareholders half-yearly dividends of 10 per cent., but since July, 1857, has regularly paid quarterly dividends of the like amount.

The directors and their friends have taken and paid up in full shares to the extent of £40,000 of this company's stock, to enable them to construct and submit to the public one river and one sea-going derrick, both now launched, prior to soliciting co-operation towards fully carrying out the highly important and promising enterprise for which the Patent Derrick Company has been established.

The directors are now prepared to issue to the public further shares of £50 each in the capital stock of the company, to the extent of £20,000. These shares are required to be paid as follows:—10 per share on application, and the remainder by calls of £10 each, at intervals of one month between each call.

Forms of applications for shares, and prospectuses, may be obtained by applying to the secretary, G. J. Sharp, Esq., at the offices of the Patent Derrick Company, 27, Cornhill, London, E.C.

In the Court of the Vice-Warden of the Stannaries, Stannaries of Cornwall.

DARKE v. BOUTH AND CLINTON.

IN RE SOUTH CONDURROW MINE. NOTICE IS HEREBY GIVEN, that, pursuant to a DECREE made in the above-mentioned Cause, and dated the 3d day of September last, a PUBLIC AUCTION will be HELDEN, at the Registrar's Office, Truro, on Wednesday, the 27th day of October inst., at Twelve o'clock at noon, for SELLING—100 (6144th) SHARES of the said defendant Thomas Felham Clinton, Commonly called Lord Thomas Felham Clinton, of and in the said MINE. For further information, application may be made to Messrs. Robt and Carnahan, solicitors, Penzance; or to Messrs. Hobbs and Hockin, solicitors, Truro. Dated Registrar's Office, Truro, October 14, 1858.

In the Court of the Vice-Warden of the Stannaries, Stannaries of Cornwall.

In the Cause of CARDOZO v. LIXTON AND OTHERS.

IN RE SOUTH CRENVER MINE. NOTICE IS HEREBY GIVEN, that, pursuant to a DECREE made in the above-mentioned Cause, and bearing date the 14th day of August last, a PUBLIC AUCTION will be HELDEN, at the Registrar's Office, Truro, on Wednesday, the 27th day of October inst., at Twelve o'clock at noon, for SELLING—40 (3426th) SHARES of the defendant William Harrop; and 20 (3426th) SHARES of the defendant Alfred Filmer. Respectively of and in the said MINE. For further information, application may be made to Mr. JOSHUA BERRY, plaintiff's solicitor, 27, Bucklebury, London; or to Mr. BROOKS, solicitor, Truro. Dated Registrar's Office, Truro, October 13, 1858.

REETH CONSOLS, TOWEDNACK, NEAR LELANT.

MR. JOHN BURGESS is instructed to SELL by AUCTION, at REETH CONSOLS, Towednack, near Lelant, on Monday, October 18, the following MINE MATERIALS:—1 40 in. cylinder pumping engine, 9 ft. stroke, 7 ft. in shaft, with 3 excellent boilers, 18 tons; 1 22 in. cylinder winding engine, double, 8 ft. stroke, cage and stand, with 1 boiler, 8 tons; 2 capstans, and 2 60 feet log shears; 120 fathoms of 9 inch capstan rope; 11 inch, 10 inch, 7½ inch plunger poles and stockings; 1 9½ inch working, 1 9 inch, 2 6 inch, 2 5 inch, all 10 feet long; 17 8 inch 9 feet pumps; 5 7 inch pumps; sundry pumps; 11 inch, 9 inch, and 8 inch, 9 feet pumps; 11 pieces—top door to match; stuffing-boxes and glands to fit the poles; flat bottom and sinking windrods; several pairs of strapping-poles; 680 fathoms of half-round tram-cable, 600 fathoms of tram-cable; 290 ft. 8½ wood rods; staples and glands, rod and clamp pins; a large quantity of 9-16 and other chain; 100 fathoms of iron and wood stave ladders; 100 fathoms 7 in. ladders; fagotged ropes, pulleys of sundry sizes; 80 stamps on five axes, two water-wheels, stamps and gear complete, plunger-lifts, pumps, flat and round rods, iron, timber, coals, and all usual plant on mines of great magnitude. May be viewed by application to Mr. C. PARRY, on the mines. The leases, plans, and inventory may be seen by application to Mr. D. G. GOATLEY, at the offices of the company, 31, Throadneedle-street. Particulars may also be obtained at the Mart, and at Messrs. GADSDEN, WINTERFLOOD, and ELLIS's offices, 18, Old Broad-street.

FORKELLIS UNITED MINES, WENDRON MOORS.

MESSRS. GADSDEN, WINTERFLOOD, and ELLIS have received instructions to SELL, by AUCTION, in One Lot, without reserve, at the Mart, opposite the Bank of England, on Tuesday, October 19, at Twelve for One o'clock, P.M., precisely, the FORKELLIS UNITED TIN MINES, situated at Wendron Moors, near Helston, Cornwall, together with the whole of the valuable MACHINERY and MATERIALS, comprising a capital 60 in. cylinder PUMPING ENGINE, a STEAM WHIM by Sims, and boiler; a STEAM STAMPING ENGINE, with two boilers; 80 stamps on five axes, two water-wheels, stamps and gear complete, plunger-lifts, pumps, flat and round rods, iron, timber, coals, and all usual plant on mines of great magnitude. May be viewed by application to Mr. C. PARRY, on the mines. The leases, plans, and inventory may be seen by application to Mr. D. G. GOATLEY, at the offices of the company, 31, Throadneedle-street. Particulars may also be obtained at the Mart, and at Messrs. GADSDEN, WINTERFLOOD, and ELLIS's offices, 18, Old Broad-street.

CARMARTHENSHIRE.

MR. BENJAMIN JONES WILL SELL, by AUCTION, at the Thomas's Arms, Llanelly, on Tuesday, the 19th day of October, 1858, at Three o'clock, in afternoon precisely:—Lot 1.—All that capital MESSAGE, TENEMENT, and LANDS, called TYN-Y-CWM, situated in the Vale of Gwendraeth, in the parish of Llanelly, now in the occupation of Thomas Treharne, at the rent of £65 per annum. Lot 2.—All that MESSAGE, TENEMENT, and LANDS, called DYSGWILFA, situated in the same vale and parish, and in the occupation of Wm. Jones, at the rent of £70 per annum. The above farms abound in rich veins of coal and iron, and adjoin each other. For particulars, apply to Mr. WALTER LLOYD, solicitor, or Mr. BENJAMIN JONES, auctioneer, Carmarthen.

TO RAILWAY COMPANIES, CONTRACTORS, IRONSTONE, LIME, and COAL MERCHANTS, and OTHERS. SALE OF FIFTY SIX-TON NARROW GAUGE RAILWAY WAGONS.

MESSRS. RODERICK AND SON WILL SELL, by AUCTION, at the Soho Carriage Works, adjoining the Soho station, near Birmingham, on the Stour Valley Railway, on Wednesday, Oct. 27, 1858 (and not on Tuesday, Oct. 26, as previously advertised), at Twelve o'clock at noon, subject to conditions to be then read, FIFTY capital six-ton NARROW GAUGE RAILWAY WAGONS, suitable for the carriage of coal, ironstone, red ores, &c., built by Mr. W. A. Adams, with side doors, breaks, wrought-iron wheels and axles. The above most excellent and substantially built wagons are in good repair, and fit for immediate use, and may be viewed at the above works on the preceding and morning of sale.

For further particulars, apply to the auctioneers, Birmingham.

COLLIERY PLANT.

MR. FLETCHER respectfully informs the public that he is instructed by Messrs. Wild, Haigh, and Co., to SELL, by AUCTION, in Lots, on Wednesday, October 27, 1858, on the premises, TONGE COLLIERY, near Middleton, Lancashire, the WHOLE of the extensive and very valuable COLLIERY PLANT, including:—ONE CONDENSING PUMPING STEAM ENGINE, cylinder 66 in. diameter, 8 ft. stroke, about 160 horse power. ONE ditto 14 horse power. FOUR HIGH-PRESSURE STEAM ENGINES, 4, 8, 16, and 20 horse power. THREE CYLINDRICAL STEAM BOILERS, with two fires through, two of them 36 ft. long and 7 ft. diameter each, and 28 ft. long by 7 ft. diameter. ONE BUTTERLEY BOILER, 24 ft. by 8 ft. ONE CYLINDRICAL BOILER, without flues, 28 ft. by 5½ ft. And ONE ditto ditto 23 ft. by 5½ ft., both with egg ends. Pump trees, from 18 to 8 in. diameter; working barrels and clack pieces: one bell-metal working barrel, 9 ft. long, 17 in. diameter, and 13½ in. on flange; two ram pumps, 12 and 14 15 in. diameter; capstans and ropes, headstocks, dippers, a large quantity of rails, plates, and pointers, chains, rods, pulleys, and cast and wrought scrap iron; iron cages, two iron buckets for winding water, 240 gallons each; about 200 three-basket wagons, wire-ropes, blocks and ropes,

TRESEAVAN UNITED MINES,
SITUATE IN THE PARISH OF GWENAP, IN THE
COUNTY OF CORNWALL.

Capital £25,000, divided into 1250 shares, at £20 per share.

These mines comprise the sets of Tresevan, Tretharup, Trethellan, Brewer, Wheel Comfort, West Treviskey, and all the Barrier sets that were reserved between these mines, the whole of which are granted for a term of 21 years, at 1-30th due for all ore raised at and above the 100 ft. level, and 1-30th for all ore raised below that level.

The first instalment of £4 per share upon every share disposed of to be paid by each purchaser on allotment, the banking house of Messrs. J. L. Stevens & Co., on account of the Tresevan United Mines.

The distribution of shares to be continued until the share list is completed, when the first general meeting of the adventurers will be called, for the purpose of allotting the shares, and the adoption of necessary measures for the prosecution of the mines.

Shares to be transferable after the payment of the first instalment, without the seller being liable to the payment of the remainder of the instalments.

To be conducted on the "CORP-BOOK PRINCIPLE."

The cost and expenses of the materials, leases, &c., and equivalent for the preliminary expenses incurred on the property, to be determined on at the first meeting of the adventurers.

The parts of the mines called Tresevan and Tretharup have been worked by the late adventurers since November, 1817, and after an expenditure of £101,456, 5d. has been repaid to the end of December, 1845, a profit, and divided among the shareholders £45,000, giving an average of more than £16,800 per year for 27 years successively, in addition to £14,000 profits divided at two former workings. The greater part of the ore was raised from one lode, commonly called the old lode.

There are many other lodes comprised within the limits of these sets, on some of which very little has been done.

Major's lode is about 60 fms. south of the old lode; it has produced good bunches of copper ore at and above the deep level, and yielded good profits. The deep adit is 60 fms. below the surface, and Major's shaft is down 27 fms. below that adit, and a level extended on the lode 30 fms.; the lode in this distance varies from 1 to 3 ft. wide, containing small bunches and stones of rich copper ore, but not in sufficient quantity to pay for working.

The deep adit is driven east 70 fms.; the lode in general small and poor. About 10 fms. above the deep adit, a level is driven east of Teague's shaft, which has produced good quantities of ore. Also at 20 fms. above the adit a level is driven east of the adit shaft about 40 fms.; the lode near the end, for 10 fms. in length, is 2 feet wide, very rich in its nature, composed of blende, silver-lead, copper, and quartz; the end of this level is about 60 fms. west of the shaft, parallel with the old lode, which was very rich about the kilns. The quantity of copper ore raised from Major's lode was 280 tons, sold for £21,046, averaging nearly £25 10s. per ton. I have no doubt a little more on this lode will produce satisfactory results.

Michell's lode is north of the old lode about 108 fms. The shallow adit (30 fathoms below surface) is driven west of the great cross-course on the course of the lode 70 fms., and about 150 fms. east of the same cross-course; it has produced great quantities of ore at and about 15 fms. below this level, worked very extensively by tributaries, but beyond this point, or at any great depth, it is standing in whole unexplored ground; this lode can be cross-cut to Major's lode at any point, and reached within 25 fms.

Caddy's lode is about 25 fms. north of Michell's lode; this is a very strong masterly lode, varying in its width from 1 ft. to 6 ft.; it has yielded immense quantities of copper and tin ore both east and west of the great cross-course. Great excavations are made from the cross-course to Caddy's shaft, which is 85 fms. west of it. The shallow adit is driven on the course of the lode 190 fms. west, and from this level and the 10, 20, and 30 (deep adit) vast heaps of ore have been obtained, and with a little expense to bring the levels and pitches into good working order, immense quantities of ore can be raised.

Caddy's shaft is sunk 20 fms. below the deep adit, and levels extended east on the lode 15 fms. to a winze sunk from the adit; this ground has been very productive, and good prospects still lie in the bottom; the lode is from 2 to 5 ft. wide. Wheel Boy's shaft is 83 fathoms west of Caddy's shaft, on the same lode; the bottom of this shaft is 24 fms. under the shallow adit. At this point a level has been driven east 4 fms.; the lode is 3 ft. wide, ore throughout. A 12 ft. level, below the shallow adit, has been driven west of Boy's shaft 8 fms., and east of shaft 22 fms.; great quantities of copper and tin have been raised at and above this level, which yielded good profits. A winze has been sunk from the 12 ft. level, and the 24 ft. level, which is into a good lode of ore, and worked in August last by four men, who realised 50 tons of copper ore, worth about 31. 10s. per ton; there is a great quantity of ore now standing east and west of the winze. This lode is unexplored below the shallow adit from Caddy's shaft, 80 fathoms west. Caddy's lode is intersected at a 60 ft. level, below the deep adit, by driving north from William's engine-shaft 108 fms. on a cross-course, and this level extended on the course of the lode 30 fms.; it is a good ore lode, from 2 to 3 ft. wide. It has drained the water from all the ground above, where I have no doubt immense quantities of ore will be found, and there seems to be no reason why the operations of this lode should not be attended by complete success. The suspension of the 60 ft. level was caused by the stopping of William's engine, which worked a machine to force in air for driving the level.

Wheel Comfort lode is 80 fms. north of Caddy's lode; it is a very promising lode, or rather two lodes running very near each other, and occasionally forming junctions; it has produced great quantities of low produce ore, and has yielded at times good large bunches of ore, but, on the whole, has not paid the expense of its working; but there is still an immense quantity of untried ground on it, and by proper development it might lead to good results.

The old lode has been wrought to the depth of 310 fms. below the deep adit, and this level extended east of the old shaft 15 fms.; the lode in this level is about 2 feet wide, containing stones of ore; the strata are a black iron kind of green stone, capels, and dirty granite, of an unproductive character for producing much copper ore.

All the levels above the 310, as high as the 166, are driven east into poor ground, and the ore taken away, but all the levels driven west of the old shaft are on a north lode, leaving the real lode standing to the south of all the levels and old workings.

The 166 is driven east to the boundary of Tresevan set, and into the kilns; in which stratum the lode produces no ore. The granite underlies the kilns on an average about 7½ ft. in a perpendicular direction.

The 166 is extended west of William's engine-shaft 44 fms., or 274 fms. west of the old shaft; in this level, 32 fms. west of William's engine-shaft, a cross-cut is driven south about 20 fathoms, and intersected a lode, and this level extended on the lode west 18 fms.; the lode varying in width from 1 to 2 feet, having a very kindly appearance, containing bunches and rich stones of yellow and grey copper ore, in beautiful friable granite and silvan strata. A cross-cut has also been driven in the 156 ft. level, 52 fms. west of the old engine-shaft, and intersected this lode; the length of this cross-cut is 19 fms.; this level is extended on the lode about 30 fms.; the lode varying from 1 to 2 ft. wide, yielding great quantities of ore. A winze has been sunk on the lode from this level down to the 166 through a good lode of ore; more than 300 tons of copper ore, worth on an average £7 per ton, have been raised and sold from a few fathoms of ground; and only a few days after this was done, the water got up and inundated the workings, when the poor men, with the water up to their necks, were obliged to leave a course of ore 3 ft. wide, worth £60 per ft. This rich lode of ore is at the extreme western point of all the workings, in whole unexplored ground. This is the real Tresevan old lode, and its component parts are identical to the ore that was raised from the great deposit east of the old shaft.

At the 136 ft. level a cross-cut has been driven south on a large cross-course, not carrying either wall with it; no lode has been seen; this cross-cut is in 20 fathoms, and no doubt it has passed the lode unseen, as lodes in general seldom appear in large cross-courses.

There cannot be a shadow of doubt, as I before said, but that this south lode is the real Tresevan old lode, and is now standing in whole ground to the south of all the old workings from the old shaft to the western boundary of the Tresevan set, which is more than 300 fms. in length, and 200 fms. in height; it is very plainly to be seen at the old shaft, where it is gone off south in the 90, 100, 112, as well as at the different levels below.

All the levels and workings west of that shaft are on a north lode, and the ore of a very different character, corrupted very much with blende and muddle, and of low produce, whereas, the ore on the south lode is of a rich quality, and but little corrupted. There are still on the north lode great quantities of ore ground; by giving the tributaries a little encouragement to get the ground opened out, so as to return sufficient quantities of ore, it will pay expenses, and yield profits. But it must be borne in mind that the Tresevan Mine has been working by the late company 28 years, and for the last 10 years almost exclusively by tributaries, who have been working by pillage and wreck to suit their immediate purposes, but this is an evil capable of remedy.

The great object is in the development of the south lode, having the advantage in driving cross-cuts from so many levels at the same time. The quantity of ore to be raised, even from a lode of ordinary value, must be immense.

All the above-named mines have intercourse and communications at their deep levels, so that one good engine of 70 or 80 ft. cylinder will be sufficient to drain the water from all the lodes in these mines. By having them under one establishment, with a general store-house for all supplies, great saving will be effected, and every section of these mines will be fully supplied to enforce its development.

Having taken a general review of this report, and reflecting on the numerous objects therein contained, I cannot forbear making a few remarks.

The first is Major's lode: considering how little has been done on it, the deepest part only 27 fathoms under the adit, and the great amount of rich ore raised therefrom, the prospects in the eastern levels all in whole ground, and approximating the kilns, gives it a feature beyond an ordinary speculation, and leaves but little doubt of success.

Michell's lode has been worked to a great length at shallow levels, and large quantities of ore have been raised, generally by tributaries. There are excellent prospects left for opening a great and lasting mine; it can be cross-cut to at any level from Caddy's lode, and intersected by driving about 25 fms.

Caddy's lode has been explored at shallow levels to a great length, but very little has been done on it below the deep adit, or west of Caddy's shaft, under the shallow adit, although immense quantities of both tin and copper have been obtained from this lode. Bearing in mind the prospects in the 60, and the water drained from all the ground above, leaving 60 fms. high of dry unexplored ground, where, no doubt, thousands of tons of ore can be raised, by a small outlay in getting the levels and pitches in good working order, that will yield good profits, and lead to great discoveries.

Wheel Comfort lode has produced great quantities of ore of a low produce, and a large quantity more can yet be raised, but, being worked as a separate mine, did not pay, and it may be a good appendage to the United Mines.

The old lode is now proved beyond a doubt to be standing in whole ground to the west of the old shaft for more than 300 fms. in length and 300 fms. in height, and a course of ore worth 60s. per ft., at the very extreme point of the workings, all in unexplored ground, which is a discovery, in my opinion, that will puzzle the imagination of the best qualified miner to calculate the results. Suffice it to say, that it is my real belief, if these mines are judiciously managed, they will be the greatest and most productive mines in the county of Cornwall; in fact, though I have stipulated the amount of capital at £25,000, I do not believe that one-half of that sum will be required, and in all probability be as prosperous and as rich as ever they have been. WILLIAM MARTIN.

I beg to hand you a prospectus and report of Tresevan United Mines. Should you be inclined to take an interest in these mines, please inform me how many shares you will take, or any less number, to be determined on at the first meeting of the adventurers.

Personal notice of the meeting will be sent to those only who signify their intention of taking an interest. The advertisement calling the meeting will appear in the *Mining Journal*, *West Briton*, and *Cornwall Gazette*.

As a large number of the shares are already subscribed for, an early application is necessary, which may be done to Capt. WILLIAM MARTIN, Tresevan United Mines, near Redruth, Cornwall.

TAVISTOCK.—WILLIAMS'S GEOLOGICAL MAP of this district is NOW PUBLISHING, at One Guinea per copy. This map is 5 ft. wide by 6 ft. long, and will be printed in eight parts. From the size of the map it is requisite they should be mounted on cloth. Any gentlemen who have kindly favoured him with their orders, or those who intend to subscribe, and wishing them mounted, and side with all rail and roller (mahogany), may have it done for 10s. extra; if deal stained, and as above, 9s.; upon intimating such to Mr. R. MIDDLETON, *Mining Journal* office; or to Mr. C. WILLIAMS, Tavistock.

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BROAD AND NARROW GAUGE COAL AND IRONSTONE WAGONS.

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PIG, BAR, PLATE IRON, CHAINS, ANCHORS, FORGINGS, GIRDERS, LONGRIDGE'S WEST HARTLEY STEAM COALS (on the Admiralty List), COKING, GAS, HOUSE, AND SMITH'S COALS, COKE, FIRE-BRICKS, &c.

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COVERS, CART AND WAGON COVERS, OIL CLOTH, STACK COVERS, BOAT SHEETS, TARPULIN, BRATTICE CLOTH, COKE AND CORN SACKS, POTATO BAGS, TWINE, &c., WIGAN.

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RAILS OF (OR SURFACED WITH) PATENT HARDENED IRON, CAN BE ORDERED direct from the following WORKS:—

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For durability, these rails have never been surpassed. They wear out several sets of ordinary rails, and do not laminate.

Full information, and terms for use of patent right, can be obtained of Messrs. CONNELL and HOPKINS, 3, Princes-street, Westminster; and of Mr. S. THORNTON, Bradford-street, Birmingham. Mr. THORNTON also receives orders for Mr. MORRISS STIRLING'S Patent Iron and Rails.

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For LICENSES TO USE the above process, apply to ROBERT LONGDON, Jun., 63, King-street, Manchester.

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STEPHEN BARKER begs to inform the Trade that he has the following articles for sale:—REFINED METALLIC NICKEL. OXIDE OF COBALT. (WIRE, &c.) REFINED METALLIC BISMUTH. GERMAN SILVER—IN INGOTS, SHEET, NICKEL AND COBALT ORES PURCHASED.

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AN OPPORTUNITY NOW OCCURS, by the retirement of the principal proprietor, FOR SECURING AN EARLY INTEREST IN one of the most promising STEAM COLLIERIES in South Wales. The coal is known in the trade as a first-class steam fuel, of remarkable purity and high evaporative power. It is admitted on the lists of the Admiralty, the East India House, and the Imperial French Marine. The present yield is equal to 300 tons a day, with a capability of increase to 500 tons, from a single pit. Loading in the railway wagons from the pit's mouth, and cheap transport to the shipping port. The payment of a large portion of the purchase may be spread over several years, and be realised out of the profits of the concern.—Principals, or their solicitors, only to address "CABON," care of Messrs. Desborough, Young, and Desborough, solicitors, 6, Wise-lane, Bucklersbury, appointing an interview.

STEAM ENGINES AND BOILERS OF ALL CLASSES,

and for MINING, MANUFACTURING, OR OTHER PURPOSES, TOOLS, MACHINERY (Cotton, Woollen, Flax, or any other description), RAILWAY, AND OTHER PLANT, NEW OR SECOND-HAND, may be had on the shortest notice, on application to Mr. WHEATLEY KIRK, Mills, Works, Engineering Machinery, and General Agent, Auctioneer, and Valuer, Cross-street Chambers, Manchester.

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A BARGAIN, the owners requiring the space which it occupies, a 45 horse power HIGH-PRESSURE HORIZONTAL DOUBLE CYLINDER STEAM ENGINE, particularly suitable for a flour mill, or for pumping purposes.—Apply by letter only, 883, Midland Counties Herald office, Birmingham.

STEAM ENGINES FOR SALE.—TO BE DISPOSED OF,

a very superior HIGH-PRESSURE HORIZONTAL ENGINE, of 19 horse power, 14 in. cylinder, and length of stroke 2 ft. ONE of 24 horse power, 16 in. cylinder, and length of stroke 3 ft. TWO of 28 horse power, 17 in. cylinder, and length of stroke 3 ft. AND TWO 35 horse power, 20 in. cylinder, and length of stroke 3 ft.—For further particulars, and terms, apply to Messrs. PAGE and CAMERON, auctioneers and land agents, 64, Old Broad-street, London, E.C.

ROTARY STEAM ENGINE AND SPARE MATERIALS.

TO BE SOLD, BY PRIVATE TREATY, an excellent ROTARY STEAM ENGINE, of 12 and 22 in. cylinders combined, with condensing cylinder, on a strong iron framing, good main beam, heavy fly-wheel, and drawing cage, very compact, and in first-rate condition, with a 10 tons boiler. Also sundry lifts of pumps, 8 in. working barrels complete, three 20 in. 9 ft. pumps, pulleys, chains, smith's bellows, and useful iron, not being required for the future working, having a powerful water-wheel and materials sufficient.—To view, apply to Capt. J. GIFFORD, on the Wheal Crebor Mine, near Tavistock, and for price, &c., to Mr. H. E. CHOKER, 8, Frankfort-street, Plymouth; or to JEAN HIRCHING, mining agency offices, No. 8, Finch-lane, London.

MESSRS. R. & J. COUPE, ENGINEERS AND IRONFOUNDERS,

MANUFACTURERS OF HORIZONTAL HIGH-PRESSURE STEAM-ENGINES, from 10 to 200-horse power; the larger description of engines mounted with their IMPROVED EQUILIBRIUM SLIDE VALVE, which has proved itself so eminently adapted for winding and other engines.

Clayton Foundry, Wigan.

CONDIE'S PATENT STEAM HAMMERS.

FIRST-CLASS STEAM HAMMERS, from 10 cwts. to 7 tons, suitable for jobbing forges, puddling forges, and the smith's shop of engineers, ship-builders, wagon builders, agricultural implement makers, railway and steam navigation companies, &c.—Govan Bar Ironworks, Glasgow.

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STEAM PUMPS, FOR LAND AND MARINE PURPOSES.

SINGLE or DOUBLE ACTING; size from 2½ to 12 in. diameter, and from 4 to 18 in. stroke; by JOHN CAMERON. Used for feeding boilers, raising water (for reservoirs, tanks, irrigation, &c.), turning power, or as a steam fire engine.

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fifteen yards from the sea. Any quantity of metal, and proved to be the best in the world. Vessels could be loaded at the quay. It comprises about three miles in length, and one in breadth. Good cart road to the state quarry, and only the one quarry in the island.—JOSEPH and ROBERT ROBERTS, Peel, Isle of Man.

INCURSTATIONS IN STEAM BOILERS ARE EFFECTUALLY

REMOVED AND PREVENTED BY USING EDWD. MUFF'S COMPOSITION.—Testimonials, with directions for use, may be had at Tversall Hall, near Bradford, by post or otherwise, where orders and communications will receive prompt attention.

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TO PREVENT ACCIDENTS BY WINDING OVER THE HEAD

GEAR, USE THE PATENT SELF-ACTING STEAM BREAK, which at every lift from the mine shuts off the steam from the winding engine and applies the break; also records the number of lifts made.—For illustrated circular and price, apply to HETH OGDEN, engineer, St. Mary's, Manchester.

TO COLLIERY PROPRIETORS.—TO PREVENT

EXPLOSIONS BY MINERS TAMPERING WITH SAFETY-LAMPS, USE ROBINSON'S AND OGDEN'S PATENT SELF-LOCKING LAMP, possessing the following advantages:—1. THE GLASS CANNOT BE REMOVED, except by the application of a fixed machine key. 2. SILENCIETY OF LOCKING. 3. THE APPLICATION OF AN ENAMELLED REFLECTOR.

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MEDAL WAS AWARDED TO THE MANUFACTURERS OF THE ORIGINAL SAFETY FUSE, RICKFORD, SMITH, DAVEY, and PRYOR, who beg to inform Merchants, Mine Agents, Railway Contractors, and all persons engaged in Blasting Operations, that, for the purpose of protecting the public in the use of a genuine article, the PATENT SAFETY FUSE has now a thread wrought into its centre, which, being patent right, infallibly distinguishes it from all imitations, and ensures the continuity of the gunpowder.

This Fuse is protected by a Second Patent, is manufactured by greatly improved machinery, and may be had of any length and size, and adapted to every climate.

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HALICK, near TRURO, CORNWALL, MANUFACTURERS OF FUSE, of every size and length, as exhibited in the Great Exhibition of 1851, and supplied to the Royal Arsenal at Woolwich, the Arctic Expedition, and every part of the globe.

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PATENT LEVER BREAK, FOR RAILWAY WAGONS,

doing away with the objectionable break rack. Can be APPLIED TO EXISTING STOCK at a TRIFLING EXPENSE. Royalty moderate. Models can be seen at 34, Great George-street, Westminster; and the breaks in action at the works of the Railway Carriage Company; at the Peterborough Station, on the Eastern Counties Railway; the Rugby Station, London and North-Western Railway; the Cardiff Docks Station, Taff Vale Railway; and at the Works, Oldbury, near Birmingham, where all communications are requested to be sent.

BRICKS.—Messrs. OATES AND INGRAM inform brick makers

on an extensive scale that their PATENT SOLID BRICK MACHINE is now THOROUGHLY AND EFFICIENTLY TESTED, and are prepared to OFFER the following counties to the trade, in districts, either by ROYALTY or PURCHASE:—Middlesex, Surrey, Sussex, Kent, Norfolk, Suffolk, Cambridge, Oxford, Gloucester, Hertford, Berks, Bucks, Huntingdon, Devon, Cornwall, Dorset, Wilts, Hants, and Isle of Wight.

With this PATENT MACHINE the ordinary surface clay requires no preparation whatever, whilst that of a rocky nature has merely to be passed through rollers in the usual way, and thence, WITHOUT ANY TEMPERING, INTO THE MACHINE, FROM WHICH THE BRICKS ARE REMOVED DIRECT TO THE KILN IN A STATE READY FOR BURNING.

The MACHINE is now making upwards of THIRTY BRICKS PER MINUTE at the works of Messrs. KIRK and PARKER, Government contractors, Fort Eson, near Gosport; and also at the Patent Solid Brick Works of T. WELLS, near Oldbury, near Birmingham.

Application for orders to see the machine in operation to be made to Messrs. OATES and INGRAM, Bradford-street, Birmingham. Samples of clay may be sent and passed through the machine, and the bricks burnt, or a sample brick will be sent to any party wishing to see one.

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Shares.	Mines.	Paid.	Last Price.	Present.	Dividends per Share.	Last Paid.
3120	Alfred Conso (cop.), Phillack [S.E.]	£2 11 10	£ 9 5	9 5	£19 3 0	£0 4 0—Aug. 15, 1885.
1624	Balteswidden (tin), St. Just	11 5 0	5	5	12 5 0	0 5 0—Jan. 1, 1884.
10000	Bampfyld (copper), Devon	0 12 6	1 1/4	1 1/4	0 0 7 1/2	0 0 7 1/2—May 12, 1885.
4000	Bedford United (copper), Tavistock	2 6 8	6	6	10 3 0	0 4 0—June 18, 1885.
200	Boscuan (tin), St. Just	20 10	65	65	22 0 0	1 0 0—Sept. 3, 1885.
200	Boulton (tin), St. Just	31 0	170	170	425 15 0	2 10 0—April 30, 1886.
1200	Brightside and Froggatt Grove, Derbyshire	3 0 0	3 1/2	3 1/2	13 0 0	0 5 0—July 31, 1886.
100	Brynford Hall (lead), Flintshire	25 0 0	50	50	0 5 0	0 5 0—July 31, 1886.
1000	Bryntall, Llandidloes, Montgomeryshire	7 15 0	4	4 1/4	0 5 0	0 5 0—July 1, 1886.
300	Buckton Conso (tin), Ferran	2 2 6	5 1/2	5 1/2	0 10 0	0 10 0—March 26, 1887.
6000	Bwlch (silver-lead), Cardiganshire	3 5 6	1 1/4	1 1/4	0 2 6	0 2 6—July 30, 1886.
4096	Calstock Conso (copper)	5 0 0	4 1/2	4 1/2	0 2 6	0 2 6—Dec. 23, 1887.
1000	Carn Brea (copper, tin), Illogan	15 0 0	34	31 3/4	243 10 0	2 0 0—Aug. 6, 1885.
2000	Carnyorth (tin), St. Just	4 15 0	5	5	0 15 0	0 3 0—June 16, 1886.
200	Cefn Cwm Brynno (lead), Cardiganshire	33 0 0	37	37	5 0 0	2 0 0—March 25, 1885.
2000	Collacombe (copper), Lamerston	5 0 0	12 1/2	12 1/2	2 5 0	0 8 0—Dec. 3, 1887.
250	Condurow (copper, tin), Camborne [S.E.]	20 0 0	60	50 60	85 0 0	2 0 0—June 10, 1887.
12000	Copple Conso (tin), England	190 0 0	27	27	7 1/2 per cent.	Half-yearly.
300000	Ditto (stock)	250 0 0	27	27	1 1/2 per cent.	Half-yearly.
1005	Craddock Moor (copper), St. Cleer	8 0 0	35	25 27 1/2	1 19 0	0 5 0—Sept. 10, 1885.
30000	Craven Moor, Limited (lead), Yorkshire	0 10 0	3 1/2	3 1/2	0 0 9	0 0 9—Feb. 28, 1886.
128	Cwmystwith (lead), Cardiganshire	60 0 0	250	250	145 0 0	5 0 0—Sept. 16, 1885.
280	Darwin Mines (silver-lead), Durham	300 0 0	150	150	122 0 0	10 0 0—June 25, 1887.
4076	Devon and Cornwall (copper)	4 6 3	9	9	0 7 6	0 2 6—April 20, 1885.
1024	Devon Great Conso (cop.), Tavistock [S.E.]	1 0 0	475	455 465	632 0 0	7 0 0—Sept. 21, 1885.
672	Ding Dong (tin), Gwilt	35 5 0	12 1/2	12 1/2	16 7 6	1 10 0—March 2, 1887.
558	Dolcoath (copper, tin), Camborne	125 17 6	100	165 170	971 0 0	4 0 0—Oct. 9, 1885.
12800	Drake Wells (tin, copper), Calstock	2 1 0	1 1/2	1 1/2	0 13 6	0 2 0—Sept. 11, 1887.
300	East Daren (lead), Cardiganshire	32 0 0	110	110	48 0 0	3 0 0—Aug. 12, 1885.
2048	East Falmouth (copper), Gwennap	2 0 0	3	3	0 7 6	0 2 6—Jan. 25, 1885.
128	East Pool (tin, copper), Pool, Illogan	24 5 0	175	175	305 0 0	2 10 0—Aug. 30, 1885.
1024	East Wind Margaret (tin, copper)	7 17 6	2	2	0 5 0	0 5 0—Jan. 11, 1884.
5700	Exmouth (silver-lead), Christow	4 14 0	2	2	3 15 0	0 2 6—April 27, 1885.
1400	Eyan Mining Company (lead), Derbyshire	5 0 0	38	38	18 13 4	1 0 0—Aug. 26, 1885.
4940	Fowey Conso (copper), Tywardreath	4 0 0	3 1/2	3 1/2	41 4 3	0 6 0—Feb. 17, 1887.
4448	Great Mining Co. for Ireland (cop., lead)	4 0 0	1 1/2	1 1/2	1 0 0	0 3 3—June 5, 1883.
2000	Goggin (silver-lead), Cardiganshire	12 5 0	5 1/2	5 1/2	22 0 0	0 5 0—Sept. 5, 1884.
1024	Gonnamena (copper), St. Cleer	14 5 0	5 1/2	5 1/2	0 7 6	0 2 6—Dec. 21, 1882.
243	Graham and St. Aubyn (copper)	109 10 0	132 1/2	132 1/2	14 0 0	2 0 0—Sept. 7, 1885.
2000	Great South Tols (S.E.) Redruth	0 14 6	14 1/4	14 1/4	2 12 6	0 6 0—Aug. 19, 1885.
26666	Great Wheal Vor (tin, cop.), Helston [S.E.]	8 7 6	1 1/2	1 1/2	0 5 0	0 5 0—Oct. 22, 1885.
119	Great Work (tin), Gernoe	100 0 0	110	110	221 10 0	7 10 0—Feb. 27, 1887.
1024	Herodotus (lead), near Liskeard	8 10 0	6 1/2	6 1/2	4 7 6	0 12 6—Jan. 11, 1888.
6000	Hilgton Down Conso (copper), Calstock	3 13 6	2 1/2	2 1/2	2 16 0	0 2 6—Nov. 25, 1886.
2000	Holyford (copper), near Tipperary	11 0 0	8 1/2	8 1/2	4 2 6	0 5 0—Jan. 28, 1887.
2560	Jale of Man, Limited (lead)	25 0 0	42	42	58 8 3	1 0 0—June 22, 1888.
20	Lacey Mining Company, Isle of Man	100 0 0	1000	1000	1420 0 0	60 0 0—June 30, 1887.
160	Levanat (copper, tin), St. Just	2 10 0	105	105	1071 0 0	5 0 0—Aug. 17, 1885.
5000	Lewis Mines (tin, copper), St. Erth	6 1 11	2 1/2	2 1/2	0 10 0	0 10 0—Dec. 20, 1885.
4000	Lisburne (lead), Cardiganshire, Wales	18 15 0	100	100	315 10 0	2 0 0—Aug. 5, 1885.
6000	Marke Valley (copper), Cardigan	4 10 6	2 1/2	2 1/2	0 5 6	0 3 0—Sept. 7, 1885.
5000	Mendip Hills (lead), Somerset	3 15 0	14 1/2	14 1/2	1 13 6	0 6 0—May 31, 1885.
5000	Merilyn (lead), Flint	3 2 6	65 6d.	65 6d.	1 11 0	0 2 6—June 22, 1883.
1800	Minera Mines, Limited (lead), Wrexham	25 0 0	100	120	33 2 6	3 0 0—Aug. 16, 1885.
20000	Mineral Company of Ireland (cop., lead, coal)	7 0 0	14 1/2	14 1/2	13 13 4	0 5 7—July 1, 1888.
5000	Nantes and Penrhyn, Limited (£2 1/2 shares)	2 5 0	1	1	0 1 6	0 1 6—April 30, 1885.
470	Newtownards Mining Company, Co. Down	50 0 0	35	35	55 0 0	1 0 0—July 1, 1885.
200	North Pool (copper, tin), Pool	40 18 0	10	10	324 0 0	2 0 0—Dec. 26, 1884.
200	North Roke (copper), Camborne	12 0 0	18 1 1/2	18 1 1/2	750 0 0	0 2 6—Sept. 25, 1885.
6000	North Wheal Basset (cop., tin), Illogan [S.E.]	12 0 0	9 1/2	9 1/2	14 12 0	0 5 0—Aug. 25, 1885.
6040	Par Conso (copper), St. Blazey [S.E.]	2 0 0	17	16 1/2	32 5 0	0 11 0—July 6, 1885.
200	Phoenix (copper, tin), Linkinhorne	100 0 0	350	350	269 10 0	25 0 0—May 6, 1885.
1000	Pollorro (tin), St. Agnes (Presidential)	15 0 0	5	5	18 11 9	1 0 3—July 11, 1887.
1772	ditto ditto (Old and ditto)	—	5	5	1 7 0	0 7 0—Sept. 23, 1885.
560	Providence Mines (tin), Uay Lelant	20 13 2	61	62 65	76 4 6	2 0 0—Aug. 25, 1885.
2500	Rhosyrdol and Bacheiddon (lead)	11 5 0	12	12	0 16 0	0 3 0—July 21, 1885.
152	Rosewarne United (copper, tin), Gwinnar	13 0 0	35	30 32 1/2	32 10 0	1 10 0—June 8, 1887.
15000	Ruardean Colliery Company, Limited	0 5 0	1 1/2	1 1/2	0 0 10 1/2	0 6 6—Feb. 4, 1886.
12000	Sordridge Conso (cop.), Whitchurch [S.E.]	0 0 0	31 1/2	18 1/2	8 10 0	0 2 6—July 27, 1887.
256	South Canadian (copper), St. Cleer [S.E.]	2 10 0	405	395 400	338 0 0	8 0 0—Sept. 28, 1885.
128	South Crinis (copper), St. Austell	19 0 0	285	285	60 0 0	20 0 0—June 18, 1885.
412	South Tols (copper), Redruth, Cornwall	8 0 0	73	71 75	76 0 0	1 0 0—Aug. 5, 1885.
5000	South Wheal Frances, Illogan [S.E.]	18 18 0	200	190 195	305 5 0	4 0 0—Sept. 6, 1885.
74	Sparrow Conso (tin), St. Just, Cornwall	3 18 0	3	3	8 8 6	0 2 6—Dec. 10, 1885.
280	Sparrow Moor (copper), St. Just	23 7 8	15	15	4 5 0	0 10 0—June 1, 1885.
970	St. Aubyn and Grylls (cop., tin), Breage	6 4 0	2 1/2	2 1/2	17 0 0	0 7 4—April 1, 1882.
20000	St. Day United (tin and copper)	2 0 0	3 1/2	3 1/2	0 3 0	0 1 0—Feb. 23, 1885.
470	St. Ives Conso (tin), St. Ives	16 0 0	30	30	917 10 0	1 10 0—Aug. 17, 1885.
9600	Tamar Conso (silver-lead), Beernston [S.E.]	4 10 0	135 6d.	5 1/2	4 13 6	0 2 6—Feb. 7, 1886.
2000	Tincoff (copper, tin), Pool, Illogan [S.E.]	9 0 0	3 1/2	3 1/2	8 18 6	0 5 0—Sept. 2, 1885.
572	Trevelyan Conso (tin), St. Ives	11 10 0	9 1/2	9 1/2	1 15 0	1 0 0—Feb. 21, 1884.
120	Trethellan (copper), Gwennap, Cornwall	15 0 0	15	15	403 13 6	2 10 0—April 29, 1881.
4096	Trevelyan (silver-lead), Menheniot, Cornwall	2 14 0	16 1/2	16 1/2	1 12 0	0 3 0—April 2, 1887.
100	Trumpet Conso (tin), near Helston	95 0 0	11	11	55 0 0	5 0 0—Dec. 20, 1884.
400	United Mines (copper), Gwennap [S.E.]	40 0 0	85	85	61 5 0	2 0 0—Feb. 12, 1886.
20000	Valle of Towy (lead), Carmarthen [S.E.]	0 12 6	18 1/2	14 1/2	0 5 9	0 1 0—July 8, 1885.
512	Wendron Conso (tin), Wendron	23 7 8	35	35	3 0 0	1 0 0—Sept. 21, 1885.
6000	West Basset (copper), Illogan [S.E.]	1 10 0	22	22 23	14 14 0	0 6 0—Sept. 22, 1885.
256	West Canon (copper), Liskeard [S.E.]	20 0 0	110	100 110	287 5 0	2 0 0—May 26, 1885.
512	West Damsel (copper), Gwennap	12 17 0	115	115	22 0 0	2 0 0—July 20, 1887.
6400	West Fowey Conso (tin and copper)	7 0 0	8 1/2	8 1/2	0 2 6	0 2 6—March 5, 1886.
1024	West Providence (tin), St. Erth	2 11 7	1 1/2	1 1/2	33 1 9	0 10 0—April 8, 1887.
400	West Wheal Tin (copper), Camborne	38 10 0	275	270 290	132 0 0	7 10 0—Aug. 17, 1885.
6140	Wheal Arthur (copper), Calstock	2 1 0	18 1/2	18 1/2	6 10 0	0 10 0—Oct. 25, 1885.
240	Wheal Bell (tin), Uay Lelant [S.E.]	15 0 0	18	18	4 10 0	0 10 0—May 11, 1885.
512	Wheal Basset (copper), Illogan [S.E.]	5 9 6	205	200 205	501 10 0	6 0 0—Oct. 5, 1885.
256	Wheal Buller (copper), Redruth [S.E.]	5 0 0	190	190	890 0 0	5 0 0—Sept. 21, 1885.
1024	Wheal Charlotte, Penrynshire	5 3 4	8	8	1 10 0	0 10 0—Sept. 9, 1885.
250	Wheal Clifford (copper), Gwennap	—	280	280	42 0 0	3 0 0—Oct. 26, 1887.
4096	Wheal Edward (copper), Calstock [S.E.]	5 10 0	3 1/2	3 1/2	0 5 0	0 5 0—March 30, 1885.
128	Wheal Friendship (copper), Devon	50 0 0	90	90	2385 10 0	10 0 0—Feb. 11, 1886.
512	Wheal Jane (silver-lead), Kea	3 10 0	16	16	8 10 0	1 10 0—Oct. 16, 1887.
8000	Wheal Kitty (tin), Uay Lelant [S.E.]	4 10 0	4	4 3 1/4	0 6 0	0 6 0—Oct. 16, 1887.
1024	Wheal Kitty (tin), Uay Lelant [S.E.]	1 1 7	7 1/2	7 1/2	31 0 0	1 0 0—Sept. 17, 1887.
4096	Wheal Lovell (tin), Wendron	33 0 0	7	7	31 0 0	1 0 0—Sept. 5, 1886.
448	Wheal Margaret (tin), Uay Lelant	19 15 0	60	57 59	90 0 0	2 10 0—Aug. 25, 1885.
1024	Wheal Mary Ann (lead), Menheniot [S.E.]	8 0 0	45 1/2	44 45	38 12 6	2 5 0—Sept. 14, 1885.
80	Wheal Olwen, St. Just, Cornwall	70 0 0	300	300	225 13 6	5 0 0—Aug. 20, 1885.
240	Wheal Reeth (tin), Uay Lelant	39 10 0	27 1/2	27 1/2	40 10 0	3 0 0—Aug. 23, 1882.
198	Wheal Tin (tin, copper), Camborne	107 0 0	130	130	286 10 0	2 0 0—Oct. 12, 1887.
1040	Wheal Trevelyan (silver-lead), Liskeard [S.E.]	4 10 0	25 1/2	25 26	33 10 0	1 0 0—July 26, 1885.
1024	Wheal Trevelyan (tin, copper), Gwinnar	11 2 6	2 1/2	2 1/2	10 2 6	0 2 6—Dec. 22, 1887.
4096	Wheal Wry (lead), St. Ives	1 14 0	2 1/2	2 1/2	2 12 6	0 2 6—Dec. 22, 1887.
5000	Wicklow (copper), Wicklow	5 0 0	40	32 1/2	30 5 6	1 10 0—July 16, 1885.

* Dividends paid every two months. † Dividends paid every three months.

FOREIGN MINES.

Shares.	Mines.	Paid.	Last Price.	Present.	Dividends per Share.	Last Paid.
10000	Alten and Quannagen United (cop.), Norway	16 10 0	3	3	£ 4 5 0	£0 15 0—Nov. 21, 1883.
2464	Burra Burr (cop.), South Australia	5 0 0	160	142	200 0 0	5 0 0—June 3, 1885.
12000	Cuba Burr (cop.), Cuba [S.E.]	40 0 0	37	35 37	86 12 0	1 0 0—Jan. 26, 1885.
10000	Copio Mining Company, Chili [S.E.]	16 0 0	13	11 1/2	5 18 0	0 10 0—March 19, 1885.
7000	English and Australian	15 0 0	3 1/2	3 1/2	11 2 6	0 17 6—July 3, 1885.
2500	General Mining Assoc., Spain [S.E.]	15 0 0	21 1/2	20 1/2	5 15 6	0 6 0—June 30, 1885.
10000	Lepanto (lead), Pono Ancho, Spain [S.E.]	3 0 0	9 3/4	9 3/4	0 8 9	0 2 6—June 10, 1885.
10000	Lepanto (lead), Pono Ancho, Spain [S.E.]	1 15 0	1 1/2	1 1/2	0 6 6	0 1 6—July 29, 1885.
10000	Marigatta and New Granada [S.E.]	1 0 0	1	1	0 6 6	0 1 6—July 29, 1885.
10000	Pontbiquand (silver-lead), France [S.E.]	20 0 0	6	4 1/2	1 0 0	1 0 0—June 26, 1885.
7000	Royal Santiago (copper), Cuba [S.E.]	16 15 0	1 1/2	1 1/2	33 0 0	1 0 0—June 12, 1884.
11000	St. John del Rey (Limited), Brazil	15 0 0	11	9 1/2	35 7 6	1 0 0—June 19, 1887.
43174	United Mexican (silver), Mexico [S.E.]	28 5 0	3 1/2	3 1/2	1 16 6	0 4 0—Feb. 14, 1883.
188676	North British Australian [S.E.]	1 0 0	7 1/2	7 1/2	0 311 0	0 1 6—Feb. 26, 1887.

NON-DIVIDEND FOREIGN MINES.

DIVIDENDS					ORIGIN MINES				
Shares.		Paid.	Last Price.	Present.	Shares.		Paid.	Last Price.	Present.
20000	Aedean Charcoal Iron [L.]	7 0 0	6	6	40000	London and Virginia (gold)...	1 0 0	1	..
50000	Anglian Smelting, Reduction, and Coal Co. [L.]	0 10 0	..	..	80000	Mount Carbon (coal), Virginia	1 0 0	..	..
20000	Australian (copper) [S. E.]	7 5 0	3/8	3/8 3/8	1000	Mount Gabriel Mineral [L.]	10 0 0	..	..
75000	Bon Accord (copper) [L.]	0 10 0	3/8	3/8 3/8	10000	New Granada (gold) [S. E.]	1 0 0	..	..
10000	Brazilian Land & Mining [L.]	5 0 0	2 1/2	1 1/2 3/4	10000	New York of Rain.	0 12 6	2 1/2	3/8 3/8
4000	Central American (silver) [L.]	5 0 0	2 1/2	1 1/2 3/4	50000	Newfound. Min. Ass. [L.]	0 2 0	..	..
25000	Central Italian (copper) [L.]	2 0 0	1	1	5000	New Hottspat Mining [L.]	1 0 0	1	..
50000	Clarendon Cons. (cop.) [S. E.]	0 12 6	4s. 6d.	..	16000	Nouvem Monde (cop.) [S. E.]	1 0 0	3/8	..
53040	Cologne Mining Co. (lead)	1 4 0	3/8	..	65000	Piedmontese (copper) [L.]	1 0 0	..	..
10000	Copago Smelting [L.]	0 10 0	13	..	100000	Port Phillip (gold)	1 0 0	3/8	13
75000	Dun Mountain (copper) [L.]	1 0 0	3/8	3/8 3/8	50000	Quartz Reduction [L.]	1 0 0	3/8	3/8
15000	East Indian Coal [L.]	0 10 0	10	..	6000	Rosie and Canada (lead)...	10 10 0	..	..
20000	Eilertse & Barlowe, Jamaica	0 14 0	1 1/2	..	47785	Strathalbyn (copper) [L.]	1 0 0	..	..
2000	English Ridge, Newfind. [L.]	0 10 0	5	..	7820	Turk, Preference, 10 per cent.	1 0 0	..	..
25000	Fortuna (lead)	2 0 0	2 1/2	1 1/2 3/8	3000	Turk's Head (copper) [L.]	0 10 0	..	100
10000	Fr. Barrier Land, Mining, &c.	1 10 0	1 1/2	..	1990	Western Africa Manganese	85 0 0	..	..
3500	Kingsthal Min. Ass., Germ.	0 0 0	1	..	35425	Werra-Jamaica (copper)	0 17 0	18s.	..
25000	Levant Mineral [L.]	10 0 0	1	..	75000	Wildberg (silver & copper)	2 0 0	3/8	..
					100000	Worthing (copper) [L.]	0 14 0	6s.	6s. 9d.